January, 1953

SOAP and Sanitary Chemicals

In this issue...

Cover photo ... Anthony G. Grady of Sinclair Refining Co. holds plaque presented to him by CSMA for his part in development of 20 year old Peet-Grady insecticide test method. James A. Green of Standard Oil Co. of Indiana made the presentation.

1-5

Make Specialty Soaps?

See SOLVAY for CAUSTIC POTASH!

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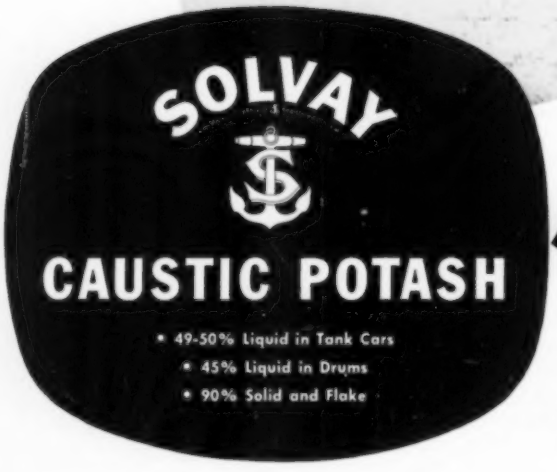

LOW IN IRON and other impurities

If you make specialty soaps, see SOLVAY *first* for your supply of CAUSTIC POTASH. SOLVAY offers you helpful assistance . . . dependable delivery . . . and Technical Service specializing in the applications and uses of CAUSTIC POTASH. See SOLVAY for CAUSTIC POTASH!

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ALLIED CHEMICAL & DYE CORPORATION

61 Broadway, New York 6, N. Y.

BRANCH SALES OFFICES

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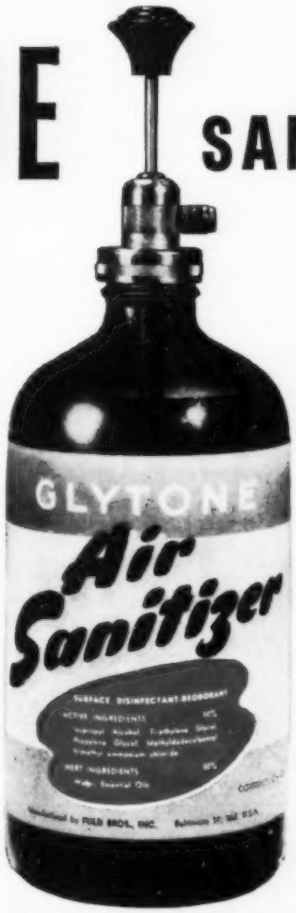
Make a 'move' to bigger sales with

GLYTONE AIR SANITIZER

Pick up greater profits . . . round out your line! Here is our popular, powerful Glytone to make of every prospect a customer, of every customer a friend.

A push of the plunger and Glytone goes to work disinfecting, deodorizing and sanitizing the air. Now, **3** big jobs accomplished in **1** quick motion. Air-borne bacteria are destroyed, odors are destroyed—all under a delicately scented mist that is both safe and pleasant. As a result, Glytone may be sprayed anywhere at anytime.



Schools, offices, factories, hotels, hospitals and restaurants are all discovering the new magic of quick-working Glytone. By cutting down on disease-carrying bacteria, Glytone reduces lost man-hours in industry, absenteeism in schools. By freshening stale air, Glytone improves relationships between doctor and patient, employee and employer, hotel and guest.

Start now to add Glytone to your line! You'll discover a huge public demand—a new pleasure in displaying the attractively labeled bottle.

For the asking, you will receive full information and a sample bottle of popular Glytone Air Sanitizer.

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CONSISTENT QUALITY FOR OVER A QUARTER CENTURY

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Why not see for yourself all of the new, sales-building features of improved Santomerse No. 1? Write your nearest sales office for a sample or information on prices and delivery. MONSANTO CHEMICAL COMPANY, Phosphate Division, 1700 South Second Street, St. Louis 4, Missouri

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SERVING INDUSTRY... WHICH SERVES MANKIND

SOAP and Sanitary

CONTENTS

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No matter where your plant may be . . . you will find General Chemical can meet your Sodium Tripolyphosphate requirements quickly, conveniently.

Service and supply are assured by General's large production facilities on the Eastern seaboard, coupled with extensive stocks at company warehouses from coast to coast.

Quality is assured by a fine, white, free-flowing product which is well suited for use in synthetic detergents and other exacting applications. It is readily soluble and possesses high sequestering ability in combination with good detergent qualities.

So—for highest quality *plus* ready availability, specify General Chemical's "Tripoly". For full information, write today to any company office listed below.

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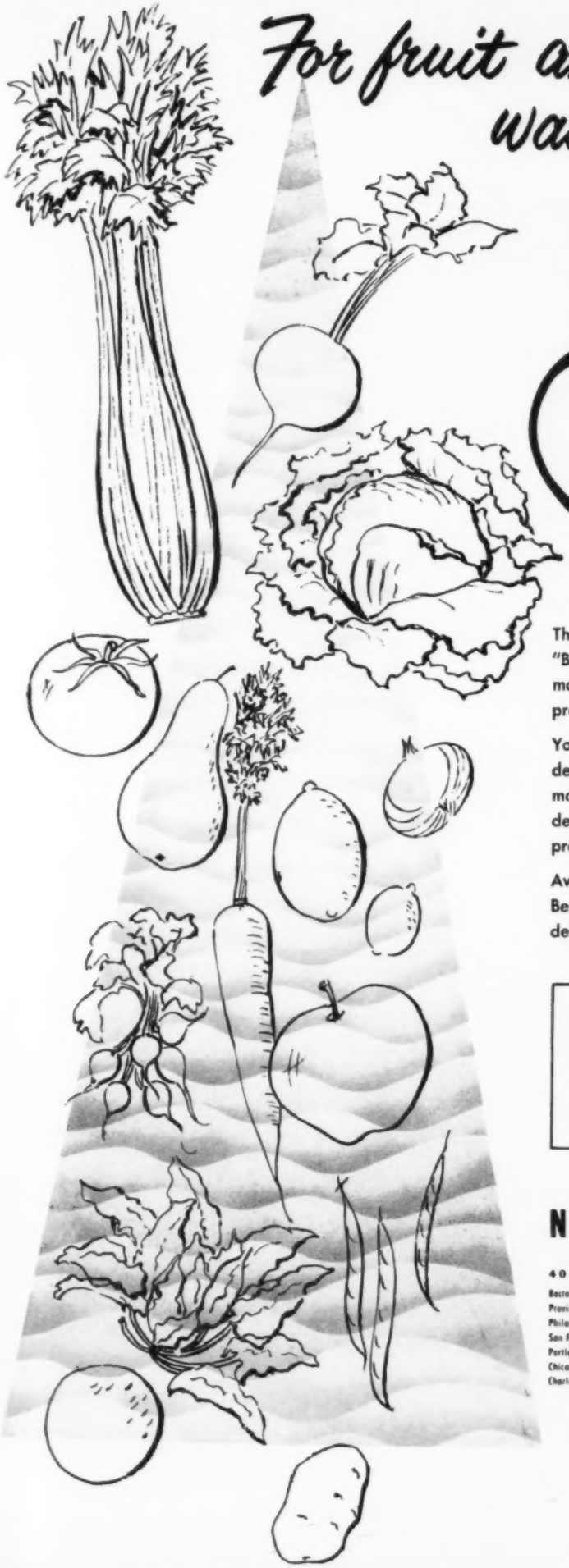
For fruit and vegetable washing compounds



there's nothing like **Nacconol***

AMERICA'S LEADING SYNTHETIC DETERGENT

There's nothing like a better-performing product to cure those "Buyer's-Market Blues." And there's nothing like NACCONOL to make your mixtures more effective, more saleable and more profitable.

You won't find a better balanced combination of wetting agent, detergent, dispersant and emulsifier . . . or a better all-around money value than NACCONOL. And you can't have a more dependable source of supply than the oldest, integrated mass-production manufacturer of synthetic detergents.

Available for prompt delivery in Flake, Granular, Liquid, Light Bead or Dense Bead form. Samples, starting formulas, price and delivery quotations cheerfully—on request.

Washing, peeling and processing fruits and vegetables to remove dirt and spray residue before packaging, canning or freezing is just one of the many markets open to compounders of mixtures based on NACCONOL. Over the past twenty-odd years, we have accumulated a large backlog of data on the various agricultural, industrial and household applications of NACCONOL-mixtures. You can get practical help on any detergent problem by writing to us.

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ALLIED CHEMICAL & DYE CORPORATION

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Boston 14, Mass., 150 Causeway St.	CApitol 7-0490	Richmond 19, Va., 8 North Fifth St.	Richmond 2-1930
Providence 3, R.I., 15 Westminster St.	DExter 1-3008	Columbus, Ga., Columbus Interstate Bldg.	Columbus 3-1029
Philadelphia 6, Pa., 200-204 S. Front St.	LOmbard 3-6382	Greensboro, N.C., Jefferson Standard Bldg.	GReenboro 2-2518
San Francisco 5, Cal., 517 Howard St.	SUtter 1-7507	Chattanooga 2, Tenn., James Building	CHattanooga 6-6347
Portland 9, Ore., 730 West Burnside St.	Beacon 1853	Atlanta 2, Ga., 254 E. Paces Ferry Rd.	EXChange 3594
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*Reg. U.S. Pat. Off.

CAND-DOX**

Candy's Wax with LUDOX* added

Candy's *NEW NAME* for the new floor treatment for Increased Anti-Slip Greater Durability Lower Floor Maintenance Cost

GRADES

CAND-DOX #CS
Originally offered as CANDY'S SUPREME Special WR-AS in July 1950

CAND-DOX #BB
Originally offered as BRIGHT BEAUTY Special WR-AS in June 1951

CAND-DOX #CS and BB are made in any total percentage of solids 8% to 18% and in 24% concentrate.

CAND-DOX #CS is slighty more durable and higher priced than CAND-DOX #BB in like percentage of total solids.

CAND-DOX floor treatments represent the finest products available where a higher than minimum recognized standard of anti-slip quality is desired. The resultant films from the use of these products are *HARD*, non-tacky, and will withstand wear, dirt and discoloring traffic marks.

DURABILITY and ANTI-SLIP . . . CAND-DOX products include a compensating factor—LUDOX*—in itself harder than wax. The addition of LUDOX* to the proper wax bases, perfected purposely to accomodate this additive, causes a greater coefficient of friction and therefore greater safety underfoot.

WATER RESISTANCE and REMOVABILITY in proper balance are very important in every maintenance program. In the development of the wax emulsion bases that go into CAND-DOX floor treatments, the important all-around high qualities of our (Standard) CANDY'S SUPREME, BRIGHT BEAUTY and other well known and accepted waxes were taken into consideration and accomplished in the final CAND-DOX products containing the new bases plus additive.

BEAUTY of floors maintained with CAND-DOX floor treatments, which are both hard and very anti-slip, is no less than remarkable and equal to the lustre for which our products have long been famed. The same buffing can be applied, if desired, and the same gloss will result.

Our policy in regard to use of new additives to our floor waxes has always been clear-cut . . . if a definite improvement can be accomplished we endeavor to formulate and combine new ingredients in such a way as to *conform to our very high standards of product function.* These standards in no case are ever sacrificed to climb on any "bandwagon" of *sales* appeal.

The laboratory work in ours or any organization is very important and the starting point for research and development of new useful products. However, FIELD TESTING is the real proof of the real value of any floor treatment. CAND-DOX floor treatments have been thoroughly field tested and are now being sold in quantity by many of our distributors, with success—again proving merit in FIELD USE.

** CAND-DOX contains CANDY'S wax emulsion with LUDOX* Colloidal silica added in such proportion as to *fully* deliver the usefulness of this additive to floor wax. *Trademark of E. I. du Pont de Nemours & Co., (Inc.) Reg. U. S. Pat. Off.

CAND-DOX is available for private brand resale and is sold only through distributors except for experimental accounts in Chicago essential to research.

Why not write us today for free samples and prices so that you can make your own FIELD TESTS?

The most complete line of water emulsion waxes of the highest quality available anywhere

CANDY'S SUPREME (Standard)
CANDY'S DELUXE
BRIGHT BEAUTY (Standard)
CANDY'S #640
CANDY'S SUPREME Special WR
#CS CAND-DOX
#BB CAND-DOX

All the above CANDY products are listed by Underwriters' Laboratories as "anti-slip floor treatment materials."

Wax Specialists for over 60 years

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SAFE POWDER BLEACHES

made with Du Pont

SODIUM PERBORATE

can make money for you!

Now is the time to cash in on the big demand for these safe powdered bleaches for use in launderettes and home laundries. This market is big, and growing fast.

Completely safe and odorless when properly compounded—powdered bleaches containing perborate can be used without harming any color or fabric which can withstand normal washing. Whether used for hand or machine washing, these bleaches are effective on *all* washable fabrics . . . natural or synthetic fibers, white, colored or printed. NO OTHER TYPE BLEACH OFFERS SUCH VERSATILITY!

Best of all, no special equipment or mixing procedures are needed to make perborate-powdered bleaches. Compounders and merchandising firms can easily add this fast-selling item to their line without heavy capital investment.

Check These Manufacturing and Merchandising Advantages

- ✓ **Low raw material cost**
- ✓ **Easy to package**
- ✓ **Minimum "dead-weight" in packaging and shipping**
- ✓ **No danger of breakage or costly spills**
- ✓ **Long storage life**
- ✓ **Odorless**

Du Pont will help you to develop suitable, low-cost formulations. We have the experience and technical facilities which can be useful to you. Also, we can show you why these safe powder bleaches are so good—why people want them and buy them.

It's easy to get details—just fill out and send in the coupon below:

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for SAFE POWDER BLEACHES

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...THROUGH CHEMISTRY

E. I. du Pont de Nemours & Co. (Inc.)
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Wilmington 98, Delaware

Please send me more information about Du Pont sodium perborate and its use in making powder bleaches.

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An All-Vegetable Oleic Acid With Exceptional Stability.

Send for your sample of CEN-OLEIC #1040 to make your own evaluation tests.

This new all-vegetable Oleic Acid has a color comparable to White Oleic, with superior color stability. The poly-unsaturate content is very low and results of the Mackey tests show over 6 hours to reach 105°C.

Study these specifications with relation to your special Oleic Acid compounding needs:

Iodine Value	84 — 92
Acid Value	191 — 195
Saponification Value	192 — 196
Titre °C	15 — 20
Color (Lovibond 5¼")	15 Y/3R max.

OTHER CENTURY OLEIC ACIDS

Century 1030 — White Oleic (U.S.P.)	Titre 3 — 5°C
Century 1020 — White Oleic (U.S.P.)	Titre 8 — 10°C
Century 1005 — Distilled Oleic	Titre 3 — 5°C
Century 1010 — Distilled Oleic	Titre 8 — 10°C

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Century Stearic Acid Products, Inc.

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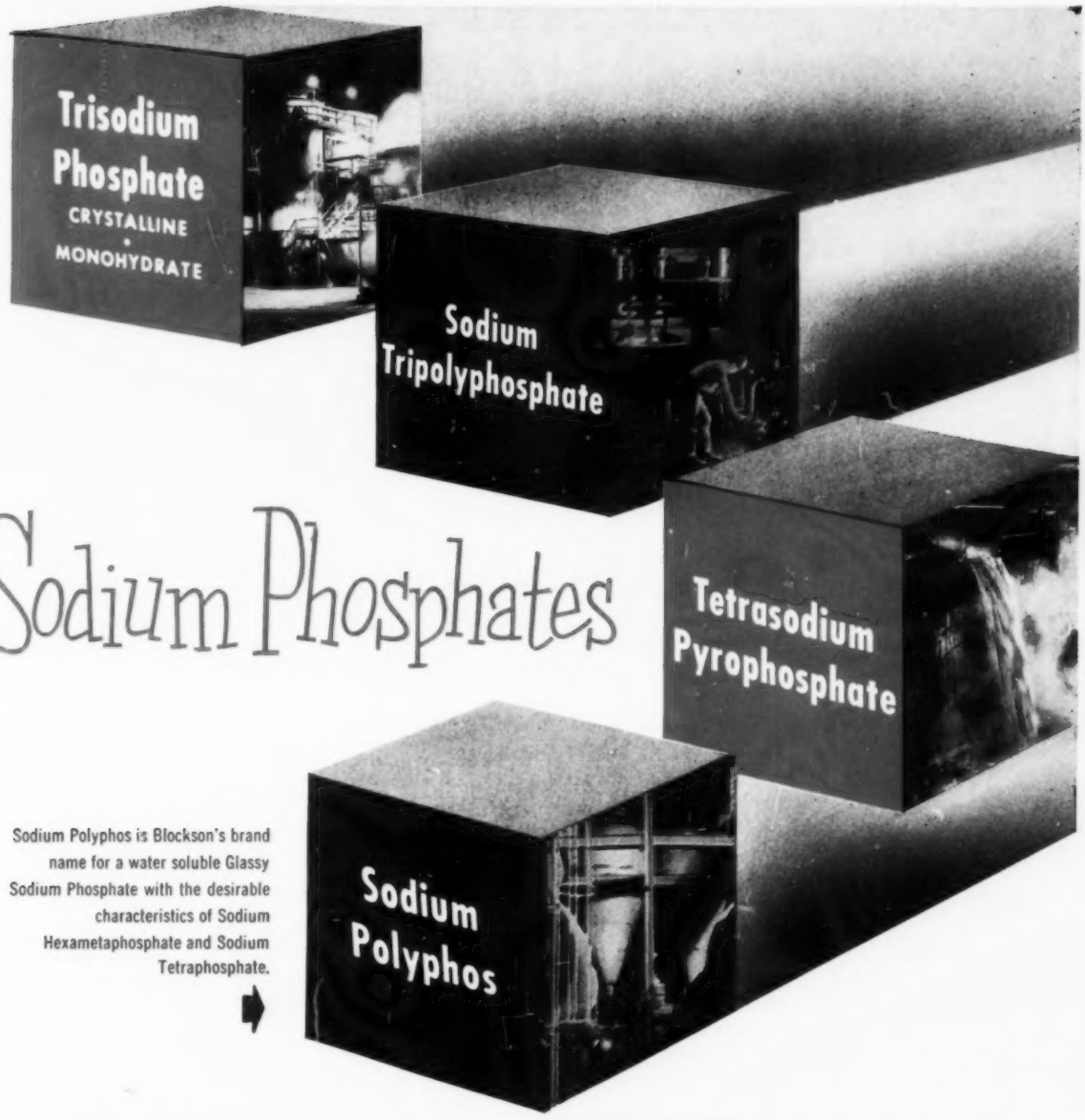

Sodium Phosphates

Sodium Polyphos is Blockson's brand name for a water soluble Glassy Sodium Phosphate with the desirable characteristics of Sodium Hexametaphosphate and Sodium Tetraphosphate.

BLOCKSON

BLOCKSON IS ALSO A MAJOR PRODUCER OF...	SODIUM ACID PYROPHOSPHATE
SODIUM SILICOFLUORIDE	CHLORINATED TRISODIUM PHOSPHATE
SODIUM FLUORIDE	DISODIUM PHOSPHATE Anhydrous • Crystalline
HYGRADE FERTILIZER	MONOSODIUM PHOSPHATE Anhydrous • Monohydrate

BLOCKSON CHEMICAL COMPANY • JOLIET, ILLINOIS

there's more

than meets the eye!

in this business of fatty acids

RED OIL

WHITE OLEINE

There's more than meets the eye in this business of fatty acids. We have found that while color is important, *stability* under processing conditions is still more important. Also, a minimum of non-fatty acid constituents in red oil and white oleine reduces the effort needed to produce uniform and dependable end-products.

We offer a combination of light color, stability and uniformity, with:

- **CONSISTENTLY LOWER UNSAPONIFIABLES**
- **HIGHER FREE FATTY ACID CONTENT**
- **LOWEST TITRES AVAILABLE**

Our products live up to the promises made for them. Sample them and see. Also, send for our new booklet "Fatty Acids in Modern Industry."

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Distributors in Principal Cities

A. GROSS & Company

Something improved! Something new!

Developed for you in 1952 to increase sales, increase profits and increase customers in 1953!

Washburn's Deep Tone Cleaner . . .

CLEANS — POLISHES — PRESERVES — DEODORIZES . . . ALL IN ONE CLEANING OPERATION.

Deep Tone as indicated by its trade name cleans DEEP, floats dirt away and enhances the appearance of floor surfaces with natural tone. You can develop a highly profitable business with this most modern liquid detergent. Only Deep Tone does all necessary jobs in one operation. For complete information, write today .

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T. F. WASHBURN COMPANY

After Closing . . .

Walker Van Ameringen V.P.

Charles P. Walker, formerly general sales manager of Charles Pfizer & Co., New York, was recently named

CHARLES P. WALKER

vice president of Van Ameringen-Haebler, Inc., New York. Mr. Walker, who resigned as general sales manager of Pfizer on Jan. 1, assumes his new responsibilities on Feb. 16. He continues his present tenure on the board of directors of Pfizer.

Exhibit at Chemists Club

An exhibit of photography, chiefly portraits of prominent persons and both oil and water color paintings held January 5-9 at the Chemists Club, New York, attracted wide attention in chemical circles. The photographic exhibit comprising some 200 studies, including President Eisenhower, Adlai Stevenson, Herbert Hoover, Dean Acheson, and many other personages of note was the work of John Loughlin, a steward at the club for many years and winner of numerous photography awards.

The paintings were done by a chemical executive, Michael Lemmermeyer, president of Aromatic Products, Inc., New York, whose work has won much acclaim in recent years. Mr. Lemmermeyer showed approximately twenty of his pictures.

West Honors Marcuse

Simultaneous employee parties at 22 of the West Disinfecting Company's 68 plants and district branches across the U. S. and Canada were held December 31st in honor of M. M. Marcuse, chairman of the firm's board of directors. Mr. Marcuse, who is completing 50 years continuous service with the company, is one of the leading authorities in the field of sanitary chemicals. He is credited with many of the developments responsible for the industry's growth as well as the growth of the West Company, the world's first and largest manufacturer in this field.

Mr. Marcuse was made President of West in 1912 and Board Chairman in 1942. He was one of the founders of what is now the Chemical Specialties Manufacturers Association.

The company is the originator of liquid hand soap, paper towels, and automatic dispensers for these materials, all of which have become standard safeguards of industrial and public health in the last 50 years. In addition to these products, the firm today manufactures insecticides, industrial insecticide dispensers, soaps and creams for preventing industrial skin diseases, industrial disinfectants, and a line of floor finishing and maintenance products. With its recent purchase of controlling interest in Lazarus Laboratories in Buffalo, the company will shortly expand its line of sanitation products for the dairy field.

Harry MacGrotty Retires

Harry F. MacGrotty, manager of the New York sales office of J. Eavenson & Sons, soap division of Wilson & Co., Camden, N. J., has retired after 20 years of service, it was announced recently by V. Levinson, general manager. Bernhard A. Waetjen, Mr. MacGrotty's associate for the past three years, has been named manager of the New York office.

Left to right: John Loughlin; William George of Hooker Electrochemical Co. and president of the Chemists Club; Michael Lemmermeyer, president of Aromatic Products, Inc.

Essential Oil Assn. Meets

Waldo F. Reis, vice-president of Van Ameringen-Haebler, Inc., New York, was elected president of the

WALDO F. REIS

Essential Oil Association of U.S.A., at the organization's annual meeting and dinner at the Hotel Savoy-Plaza, New York, Jan. 9. He succeeds George H. McGlynn of Magnus, Mabee & Reynard, Inc., New York, who served as president for the past year. Louis Gampert of Felton Chemical Co., New York, was elected vice-president, and Pierre Coutin of Roure-Dupont, Inc., New York, was re-elected secretary-treasurer. Mr. McGlynn and Robert Engel of Trubek Laboratories Inc., E. Rutherford, N. J. are serving as directors.

Overproduction of certain types of essential oils and "dumping" in the U. S. without thought of profit caused the industry to experience a "turn-about unlike anything in the past 25 years", Mr. McGlynn said in his president's address. He predicted that business in the first half of 1953 should be better than in the last half of 1952. He also expressed the belief that deflated markets and commodities should recover some of the ground they lost inspired by a new Administration. The past year seemed to be characterized by "selling, unloading and getting out from under with no thought of profit", Mr. McGlynn stated. He urged an end to the dumping of 1952 and asked the group to enter the new year with a united front.

The Scientific Section of E.O.A. met earlier in the day at a luncheon at the Gramercy Park Hotel, at which time members adopted seven additional articles to its book of specifications and standards, making the total 68, including essential oils, synthetics and isolates.

The products and the chairman of the subcommittee presenting the new specifications included Oil olibanum by H. LeB. Dagget of George Lueders & Co., oil opoponax by E. Langenau of Fritzsche Bros., oil balsam Peru by A. Warren of Dodge & Olcott, Inc., oil balsam Tolu by E. Langenau, oil ocotea cymbarum by A. Fiore, Givaudan-Delawanna; oil amyris by George V. Brannigan, Ungerer & Co., and oil guaiac wood by Dr. J. Keller of Schimmel & Co.

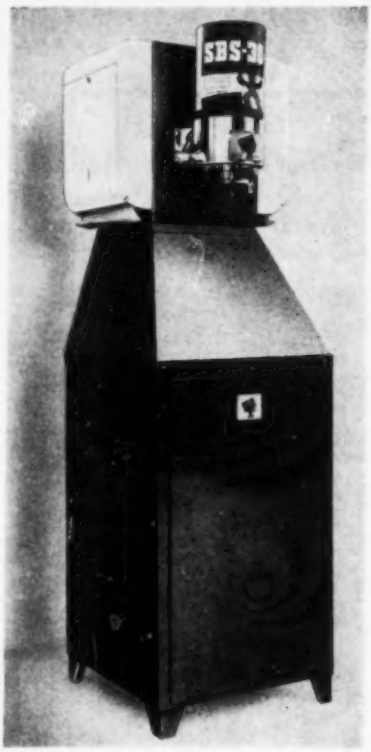
Mailing of Poisons

Proposed changes in the postal laws and regulations covering the mailing of poisonous materials including insecticides, disinfectants, rodenticides, drugs, medicines or other chemicals were issued Jan. 2 by the Post Office Department, Bureau of Transportation, Washington, 25, D. C. In a 12-page summary of requirements and explanations specimen labels and other details are given. A limited number of copies are available without cost at the offices of the Chemical Specialties Manufacturers Association, 110 East 42nd St., New York, 17, N. Y.

Charles Van Creveld, who represents Procter & Gamble Distributing Co. in Belgium and the United Kingdom, returned to Brussels recently on Sabena Belgian Airlines. He had been on a trip of several weeks to the United States discussing business with the distributing company in New York. Mr. Van Creveld heads Ets. Van Creveld, S. A., Brussels and also Thomas Hedley Co., Ltd., Newcastle-on-Tyne, England.

New Waterless Washstand

A new type portable "waterless washstand" designed to offer hand washing facilities in factories, garages,



mines, and other places where running water may not be available has been announced by Sugar Beet Products Co., Saginaw, Michigan. The equipment comprises a dispenser for waterless cleanser with paper towel dispensers attached to a metal receptacle for deposit of used towels. The company states that the new equipment is designed "to bring the washroom to the worker" in a portable, self-contained unit. The dispenser is designed to use the firm's SBS 30 paste waterless cleanser.

Curtis Cox of West Dies

Curtis D. Cox, 54, Dallas, Tex. district manager of West Disinfecting Co., Long Island City, N. Y., died Dec. 31 in a Dallas hospital. He is survived by his widow; a son, Sherman W. Cox; a daughter, Miss Evelyn Cox; a sister, Mrs. Wilma Anderson of Fort Worth, and his father, L. W. Cox, also of Fort Worth. Honorary pallbearers were members of the Dallas Sales Executives Assn.

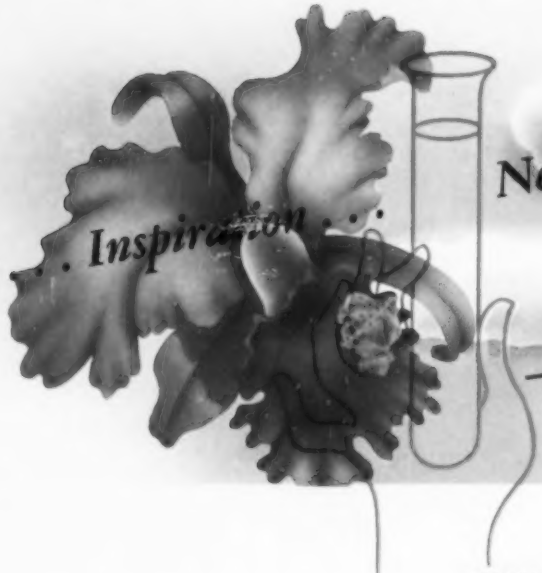
ALBERT VERLEY & COMPANY SUGGESTS:

MAKE FULL USE OF THE LATEST IN

Aromatics

—FOR SUCCESS IN THE
BATTLE OF THE BRANDS

TURN
THE PAGE



Ideas . . . Inspiration . . .

New Development in the Field of

Aromatics

CONSULT ALBERT VERLEY & COMPANY FOR MODERN MATERIALS TO STRENGTHEN THE COMPETITIVE APPEAL OF YOUR PRODUCT

Spending in 1953? Yes, plenty of spending—but with discrimination! To coax the consumer's dollar this year, the perfumer must use all of his talent and ingenuity.

To help you do just that is the purpose of Albert Verley & Company's complete service. Especially, we should like to acquaint you with the work we have been doing with some of the newer chemicals.

A number of recent Albert Verley & Company creations, based on this research, have brought a remarkable response from the industry. You too may find a new lift for one of your important formulas.

Let us review your odor requirements, without obligation. We shall be happy to offer our suggestions and furnish working samples for your experimental work. Call or write today.

ALBERT VERLEY AND CO., INC.
466-472 W. Superior St., Chicago 10, Ill.
114-116 E. 25th St., New York 10, N. Y.

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ALBERT VERLEY AND CO., INC.
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Representatives in all principal cities throughout the world.

Where Your Dollars Have More Scents

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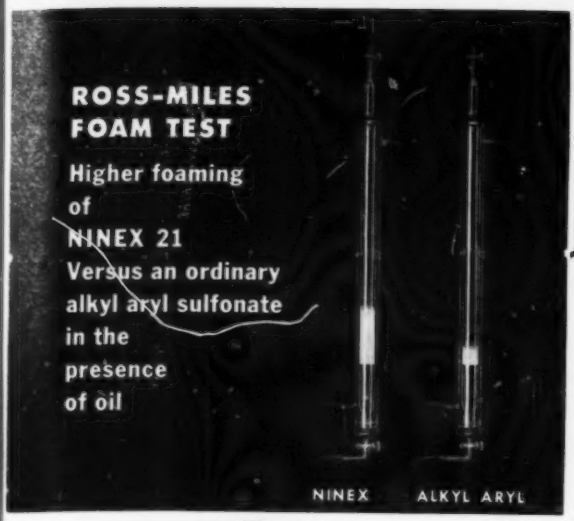
AND COMPANY, Inc.

Headquarters for Odor Appeal

Synthetic Aromatic Products and Organic Isolates • Synthetic Flower Oils and Aromatic Bases • Bouquets and Finished Compositions



This is a **FOAM-STABILIZED** *liquid detergent . . .*

NINEX 21

In clear water, many of the sulfonated detergents on the market produce good foam. But they all tend to collapse rapidly in the presence of grease or other soils.

NINOL, the originators and oldest manufacturers of alkylolamides (amine condensates), has for some time been carrying out protracted research into the known foam-stabilizing properties of certain amides.

Now, the results of this research have made possible the announcement of NINEX 21, in which a new and highly effective stabilizing amide is combined with one of NINOL's new sulfonates. This makes available to you a 60% active liquid detergent having excellent foam stability and cleansing action, at remarkably low cost.

Used at full strength, or cut back with several volumes of water, NINEX 21 is the outstanding product for *liquid dishwashing, car washing, bubble baths* or any other application where copious foam is desired.

ALSO

NINOL 1281 For synthetic floor cleaners, or for blending with liquid soaps.

NINOL 128 For low priced viscous nonionic bar glass cleaners; also viscous detergent sanitizers.

NINOL AA62 For stabilizing foam of alkyl aryl sulfonates.

NINOL HA10 For water-in-oil emulsions such as absorption bases, dry cleaning detergents, etc.

NINOL

Detergents — Emulsifiers

NINOL LABORATORIES

719 S. CLINTON • CHICAGO 16 • PHONE CHESAPEAKE 3-9625

In Canada: Chemical Developments of Canada Ltd., 420 Lagauchetiere Street W., Montreal 1, Quebec

The LIQUID Sweeping Compound you put in the brush!

Easiest way to keep floors clean!

Shaking removes dust from brush!
Water rinse brush to cleanliness!

Write for full information and startling demonstration

Now! No more mounds of compound to push around! Simply pour amazing SANITREET into your yarn brush. Its high D.A.F. (Dust Absorbency Factor) readily attracts, emulsifies, imprisons dust and free-soil in your yarn brush. Shaking the yarn brush removes dust, and a simple water rinse restores it to true cleanliness —instantly!

Safe on all surfaces

Containing wax, SANITREET is good to use on hard and soft floor surfaces. Daily floorkeeping with SANITREET prevents dirt build-up, keeps floors clean between scrubbings . . . cuts maintenance time, labor cost!

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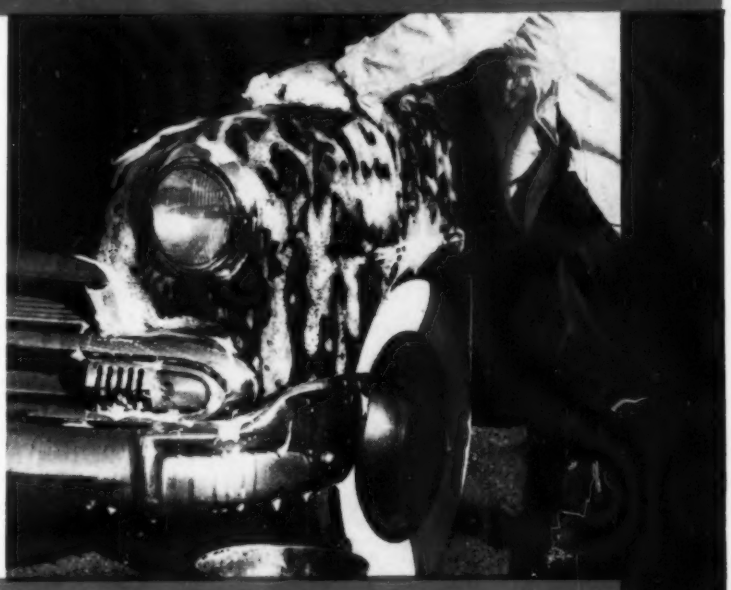

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. . . in brief

as the editor sees it . . .

MONOPOLY AGAIN . . . The most recent previous attempt to find an indictment against the "soap monopoly" in a criminal federal grand jury action having been abandoned a month ago, the Department of Justice is now endeavoring to do essentially the same thing via a civil action in the courts. After examining a trainload or two of back records of the large soap companies in the previous investigation at Newark, N. J., the federal grand jury found no evidence of monopoly nor violation of the anti-trust laws. Otherwise, they would not have thrown out the case as they did.

Now, we are to see the performance over again, but in a slightly different setting,—civil instead of criminal. We are to see the large soap companies put to many thousands of dollars in expenses to defend themselves against charges which in the customary manner will be well-aired in the newspapers. The evidence which failed to convince the grand jury undoubtedly will be presented again,—and with certainty, let us add, also well-aired in the daily press.

But, if nothing comes of this "monopoly" suit, we can rest assured that the Department of Justice will steal silently away into the night. As is their wont, there will be no publicity releases to clear the reputation of the defendants.

•

SALES JOB . . . Lost in the shuffle of recurring political and legal broadsides against the soap industry is the fact that soap continues to be one of the cheapest and best-made commodities which the American housewife buys. Nowhere in the world is good soap so cheap or so plentiful as in America.

That the American soap industry has done an excellent job in selling more and better soap to consumers, there is no doubt. If the job which the industry had done in selling itself to the public and the politicians were half as good, there could be no complaint. But so bitter is the competitive battle of selling one brand against another, detergents against soaps, and vice versa, little time or space remains to tell the world what a fine job the industry is doing in supplying excellent products at low cost.

Adverse legislation and monopoly charges might receive far less public acceptance if the public knew exactly how well it is being treated in quality and price by the soap industry. But does it know? We doubt it. Why not shift some of the industry sales emphasis in this direction for a change?

•

AEROSOL AWARDS . . . At the recent annual meeting of the Chemical Specialties Manufacturers Association in New York, awards were made for the best aerosol package designs in seven classes of products. In two classes of the seven, the judges refused to issue regular No. 1 citations, implying that none of the packages in these classes was worthy of a full award. Instead they awarded "certificates of merit," a sort of least-worst citation. That the entrants in these two classes were slightly disgruntled is to put it mildly. Our own reaction after examining the packages was that the judges were laying on their judicial acumen a trifle thick and missed the point of the competition.

With the merit of the majority of the awards, we agreed, but with several we disagreed, as did a number of others with whom the matter was discussed. Some disappointed entrants were outspokenly upset and registered varying degrees of bitterness. The winners on the whole accepted their awards as justly due.

The object of these package award contests is, we believe, to stimulate improvement, build good

will, and to gain that greatest of all panaceas, "publicity." We have a hunch that this first aerosol contest sort of missed the target in these respects, thereby illustrating the inherent dangers in any "contest" where commercial interests may be involved.

•

CHLOROPHYLL . . . Our old pal, chlorophyll seems to have run head on into a hornet's nest. At a meeting of some American Chemical Society people in New York last month, a symposium on chlorophyll well nigh decimated the oft-proclaimed virtues of the green stuff. Words of the speakers were cold and calculating, lacking the ebulient enthusiasm of the chlorophyll advertisements. Nary a one stated that he had found any evidence to substantiate the claims of the chlorophyll clan. The jist of the most unkind remark of all was that "the bubble had burst" and from now on, chlorophyll would be just chlorophyll sans the magic virtues attributed to it.

Whether chlorophyll or copper chlorophyllin or any chlorophyll derivative has or has not any deodorizing or healing virtues cannot be proved by us. We sort of got the idea that the advertising agency boys had the bit in their teeth and were running a trifle wild. But, we just sat and waited, knowing that sooner or later something had to happen. Now, the bewhiskered gentry of science are after the chlorophyll fellows and they had better watch out. There is nothing more fierce than an outraged scientist!

•

GLYCERINE . . . A further advance in the price of refined glycerine late last month was not wholly unexpected. This second advance of five cents per pound followed by about thirty days a similar previous upward price move by refiners. That the reduced production of 1952, highlighted by the prolonged strike at the plant of the only synthetic glycerine producer, is now beginning to make its full effect felt in the market, seems to be evident. Demand has continued heavy in the face of insufficient supplies which has made the current situation inevitable.

This latest price advance by refiners is in effect the handwriting on the wall. Temporary leveling of supply and demand may bring an easing of the market periodically through the years, but as long as the world output of glycerine continues to drop behind the steadily growing demand, the basic situation will remain unchanged.

A few months hence, the market may ease, but we can be certain that any such situation will be followed soon again by more frequently recurring scarcities. The long-range trend is toward scarcity due to steady permanent increases in consumption. The only genuine solution would seem to be an equivalent increase in world production. Lacking this, trouble will continue to lie ahead for glycerine users for some time to come.

•

ODOR . . . If an insect spray is the finest in the world for killing bugs, but at the same time malodorous and unpleasant to use, we doubt that people will continue to buy it indefinitely. This was brought home to us rather forcefully not long ago by a female shriek: "Don't spray that stuff around here. The odor of it makes me sick!" So, we took the product elsewhere and tried it out. The lady was quite correct. The insecticide mist gave off only one detectable odor, an unpleasant aroma which seemed to be chiefly kerosene or fuel oil. If any covering odor were present originally, it had long since departed. Perfume was conspicuous by its absence.

Were this the product of a small operator selling only in a few counties back in the sticks, its shortcomings might attract small attention. But it was a relatively new insecticide aerosol of one of the largest and supposedly most enlightened marketers, the result of much research. The company has a reputation for high quality which this product will not enhance. How it could get on the market with such obvious faults is a puzzle to us. But it has, and unless it is changed, damage to a good reputation can result. Just as we suggested a year ago to some of the synthetic detergent people that they call in qualified perfumers, we believe the same advice might apply here and to a few other products among the insecticide aerosols. Try on this shoe for size!

as the reader sees it . . .

Navy Wax Purchase

Editor:

We wish to call your attention to an error contained in the December, 1952, issue of *Soap & Sanitary Chemicals*. The item in question is on page 85, column 3, and reads as follows:

"FSS Floor Wax Award

Awards on 10,784 gallons of floor wax in a recent opening for miscellaneous supplies went to the following: Baird & McGuire, Inc., Holbrook, Mass., item 1, 60 cents; Lambert Corp., Houston, Tex., item 3, 18 cents, and Trio Chemical Works, Inc., Brooklyn, item 4, 16.3 cents, and item 5, 13 cents."

As we advised you verbally on December 12, that no such award was made by the Federal Supply Service of the General Services Administration. Accordingly, it is requested that you investigate the source of your information and publish a correction in the next issue of your publication.

JOHN J. CRAWFORD,
Acting Chief, Purchase Division,
Federal Supply Service,
General Services Administration,
New York

The opening referred to was not one of the FSS, rather it was a U. S. Navy procurement order for Prescott Island, Me. We regret the error and any embarrassment it may have caused FSS or others involved. — Ed.

What Dirty Digs?

Editor:

Why all the dirty digs at Chuck Luckman?

Harry G. Shapiro, president
Industrial Soap Co.
St. Louis, Mo.

Chuck's personal publicity during and after his tenure in the soap industry has kept bringing him to our attention. We merely take occasion from time to time to report his activities to his old friends in the soap industry. Ed.

Newer Soak-Type Cleaners

Editor:

I have just finished reading the article on "Metal Cleaners" by Milton A. Lesser that appeared in the October and November issues of *Soap & Sanitary Chemicals*. As one who has been connected with this field for over twenty years, both in the plant and in the research laboratory, I believe your author has done a commendable review job with one exception. He has entirely missed the recent development in alkaline soak-type cleaners.

Heretofore, soak-type cleaners have been characterized by high alkalinity, except in those cases where nonferrous parts necessitated a reduction in alkalinity as well as the use of silicate-based compositions. It has now been demonstrated that the use of high alkalinity, heavy-duty cleaners is no longer necessary to ensure efficient soak cleaning. Such hazardous compositions can now be replaced by medium pH cleaners (12.2 pH maximum) containing synergistic mixtures of anionic and nonanionic surfactants. Alkyl aryl sulphonate anionic agents are used with alkyl aryl polyethylene glycol ether nonionics to impart superior detergent characteristics to any suitable alkaline salt detergent or mixture of alkaline salts. By the use of silicate-based compositions (pH 12.2 maximum), the soak cleaner is suitable for ferrous and non-ferrous materials.

I refer you to U. S. Army Specification AXS-1849, dated 15 June 1949, and also to the same material now covered by Interim Federal Specification P-C-436, dated 19 February 1952. These two specifications describe the cleaner which has made obsolete most of the soak-type compositions mentioned in your article.

A. M. MANKONEICH
Darlington, Md.

Thank you, Mr. Mankoneich, for taking the trouble to write and bring us up to date on this phase of metal cleaning. — Ed.

We're His "Bible"

Editor:

Have read your Soap & Sanitary Chemicals for the past five years and can certainly say it is the "Bible" of our trade. We have obtained a number of new and improved lines through this magazine.

Lorne St. Clair, general manager
Lorne St. Clair and Co., Ltd.
Windsor, Ont., Canada

Thanks for the compliment, Mr. St. Clair. His firm, incidentally, is one of the up and coming young sanitary supply jobbing firms in Canada. — Ed.

"Don't pull my leg, Leo. How can glycerine be short?"

CARLOS ROMULO

MISS ALTA LA BELLE

DONALD PRICE

Soap Industry Meets Jan. 27

GEARED to the theme, "What's Ahead for the Soap Industry", the program for the 26th annual convention of the Association of American Soap & Glycerine Producers, Inc., calls for three days of intensive discussion of industry problems at the Waldorf-Astoria Hotel, New York, Tuesday through Thursday, Jan. 27-29. In addition to divisional meetings to be held on all three days of the convention, there are to be two general sessions at which the economic outlook for 1953, the trend of sales of soaps and detergents for this year and the raw materials picture in the next twelve months will be discussed.

While there is to be plenty of heavy discussion of industry concerns in formal meetings and at informal gatherings, the social side of the meeting is not being neglected. There are to be group luncheons on all three days, a cocktail party following the first day's session, which is devoted to a meeting of the Fatty Acid Division, the Maid of Cotton fashion show and cocktail party on the second day of the meeting, a convention breakfast to start off the final day of the meeting, which concludes with a reception and banquet in the grand ballroom.

In addition to prominent soap and synthetic detergent industry and raw material supply firm representatives, a number of soap and detergent consumers will be heard at the convention.

From outside the industry, speakers include U. S. Senator Paul H. Douglas of Illinois, former president of the American Economic Association, who is discussing "The Economic Outlook for 1953"; His Excellency Carlos P. Romulo, Ambassador of the Philippines as banquet speaker; Kevin McCann, president, Defiance College and former assistant to General Dwight D. Eisenhower, and author of "The Man from Abilene", Thursday luncheon speaker; and Jean Wade Rindlaub, vice-president of Batten, Barton, Durstine & Osborn, Inc., winner of the 1951 Advertising Woman of the Year Award and one of the first of her sex ever to address an AASGP meeting.

Each of the three luncheons will have as an added attraction a "News Featurette" by Lowell Thomas, famous newscaster, author and explorer.

Officers and directors of the AASGP will be chosen for the coming year, as will officers of the Fatty Acid, Glycerine and Specialty Soap divisions of the association.

Registration for the three day meeting gets under way at 9:00 a.m. Tuesday, Jan. 27, prior to and during the day of the Fatty Acid Division meeting. The group begins its activities with a members' business meeting from 10:30 a.m. to 12 noon, Jan. 27, in room 4W. The group luncheon, for which Dr. Raymond H. Ewell, manager, Chemical Economics Service, Stanford Research Institute, is to speak on the "Outlook for Fatty Acid Raw Materials", will be held in room 4X. Other speakers at the division's meeting include: Oliver Burke, president of Burke Research Co., whose topic is "Use of Fatty Acids in Rubber"; Dr. E. F. Wagner of Witco Chemical Co. who is speaking on the "Use of Fatty Acids in Metallic Soaps", and L. F. Church of Emery Industries, Inc., who discusses "How to Use Industry Statistics".

A cocktail party, for which *Soap & Sanitary Chemicals* magazine is host, will be held in the Perroquet Suite following the conclusion of the Fatty Division meeting.

Wednesday morning, Jan. 28, is given over to a general session. George A. Wrisley, vice-president and general manager of Allen B. Wrisley Co., Chicago, president of the Soap Association, gives his address of welcome and review of the year as the opening feature of the Wednesday morning session. Also at this session, Philip J. Stomberg of A. C. Neilsen Co., Chicago, reports on household

soap sales trends and Senator Douglas predicts what he thinks is the economic outlook for 1953.

Following the Wednesday luncheon, at which Miss Rindlaub discusses "Women—The Decision Makers" and the glycerine research award is presented by John W. Bodman of Lever Brothers Co., New York, two divisional meetings are to be held. The Glycerine Division and the Specialty Soap Division meet concurrently from 2 to 4:00 p.m.

The Glycerine Division meeting opens with a panel discussion on improving yield and quality of crude glycerine. The "Use of Glycerine in Cellophane and Other Food Wraps" is being discussed by Ralph S. Heller, Olin Industries. Two reviews, one on glycerine research, the other on glycerine advertising and publicity, are being presented by Carl S. Miner, Jr., Miner Laboratories and J. C. Snape, G. M. Basford Co., respectively. The present status of glycerine is being reported on by E. Scott Pattison, manager of the Glycerine Division.

Consumers of soaps and detergents are the featured speakers at the meeting of the Specialty Soap Division, the afternoon of Jan. 28. Daniel H. Larlee, plant manager, Lord & Taylor, covers "Department Store Housekeeping"; Alta La Belle, consultant to the Veterans Administration, reports on "Hospital and Institution Maintenance", and Dr. H. Harding of National Dairy Research Laboratories speaks on "Soap Products as Used in the Dairy Industry".

Both sessions conclude with business meetings, reports of the nominating committees and elections of officers.

The Washable Cotton Fashion Show, which features the introduction of the "Maid of Cotton for 1953", runs from 4:00 to 6:00 p.m. in the grand ballroom, Wednesday afternoon, Jan. 28, and is followed by a cocktail party in the Sert Room, for which *Life* magazine is host.

-29 in New York

The final day of the meeting, Thursday, Jan. 29, opens with a convention breakfast in the Empire room, the host for which is *True Story* magazine. From there activity moves to the grand ballroom where the general session gets under way with a panel discussion of the outlook for such raw materials as fats and oils, phosphates, petroleum alkylates, alkalies, sulfuric acid, packaging materials, essential oils and other perfuming materials and materials of construction. A portion of the morning's program is set aside for papers on synthetic detergents. Dr. Donald Price of Oakite Products, Inc., speaks on "Compounding Detergents", a speaker to be announced is covering engineering and production of detergents and Dr. Reginald Wakeman, technical director, Quaker Chemical Products, is to discuss "New Markets for Detergents". The concluding feature of the morning session is a review of the association's cleanliness promotion given by E. W. Wilson, vice-president of Armour & Co., Chicago.

The Thursday luncheon opens with the Lowell Thomas "News Featurette" and follows with an address, "Eisenhower, A Study in Leadership" by the author of the book, "The Man from Abilene", Kevin McCann, who served as an assistant to General Eisenhower and is now president of Defiance College.

Immediately following the Thursday luncheon, the Soap Association holds its annual business meeting. At that time the group hears the treasurer's report and the report of the nominating committee, the election of a new board takes place and the association manager presents his report. The board of directors meets in the Pilliment Suite at 3:00 p.m.

A meeting of the Industrial Soap Division is held at 3:00 p.m. in the West Foyer. It features an address on the "Outlook for Cotton" by Paul Jones of the National Cotton Council. Another paper dealing with the "Outlook for Man-made Fibers" is to be given by J. B. Quig, manager of the textile research division of E. I. du Pont de Nemours & Co.

(*Turn to Page* 63)

MISS JEAN WADE RINDLAUB

ROY W. PEET

SEN. PAUL DOUGLAS

New Bacteriostat

An Evaluation of Biological of "Actamer"* (2,2'-Thiobis

By R. S. Shumard, D. J. Beaver
Organic Chemicals Division, Monsanto

SINCE the early days of Lister's work (1867) on "aseptic" surgical technique, bacteriologists and chemists have maintained a constant search for more effective germ-killers, with low toxicity, to protect man against disease. The tremendous chemical advances and developments in microbiology over the past 80 years have provided many types of synthetic and antibiotic compounds to combat the microbe. However, the first disinfectant, phenol, and its derivatives are still used extensively in almost every phase of sanitation and hygiene.

Particular research attention has been directed in recent years to the search for anti-microbial agents suited to skin antisepsis. About 15 years ago, with the discovery and introduction of 2,2'-methylenebis phenolic compounds, unusual bacteriostats were found which have an affinity to human skin (1,2,3,4,5).

The most widely used compound of this type was 2,2'-methylenebis(3,4,6-trichlorophenol), more popularly known by its generic name, hexachlorophene. This compound has unique properties and its introduction constituted a significant advance in the suppression of the undesirable microflora of the skin.

In the course of an extensive screening program, a thiobis phenol has been found which has exceptional bacteriostatic activity. Although reports have been made on certain of its biological characteristics (6,7,8,9,10,11), the true potential of this agent as a bacteriostat for prolonged topical application has previously escaped attention.

Chemical, Physical Properties

THE compound which we wish to describe is 2,2'-thiobis (4,6-dichlorophenol), having the following structural formula:

The material is colorless, tasteless, essentially odorless, and melts at 188°C. It is a crystalline powder with a refractive index of 1.66-1.71 and a specific gravity of 1.73 at 25°C. measured by displacement in water.

The solubility of 2,2'-thiobis-(4,6-dichlorophenol) in water is quite low, being in the order of 0.0004 per cent at 25°C. The addition of an alkali such as sodium hydroxide to form the mono-sodium salt increases the solubility markedly, as is apparent in Table I. It will also be noted that its solubility varies with the concentration of caustic although the ratio of sodium hydroxide to the phenol remains constant at 2 to 1.

Certain of the common organic solvents are capable of solubilizing 2,2'-thiobis(4,6-dichlorophenol) quite readily, as is apparent in Table II. Several of these solvents are common to cosmetic formulations and should facilitate application.

The vapor pressure, as measured by the effusion method and extrapolated to 0°C., 25°C., and 37°C., is presented in Table III.

The stability of the compound was determined in the pure state by subjecting the material to a temperature of 50°C. for 17 days. After such treatment, variations in reflectance (compared with MgO as 100) and melting point were determined. Reflectance was slightly decreased which indicates that the material may show slight darkening on long standing, but the melting point determinations indicate that quality is unaffected by storage.

Stability tests were carried out on low concentrations (one to two per cent) in such menstrua as acetone, isopropyl alcohol, propylene glycol, coconut oil soap and a typical surgical scrub soap. No significant changes in color, odor, consistency, or antimicrobial activity were apparent in any of these formulations after storage for one year at 25°C., 37°C., or 50°C. Since it is not unusual for this type of compound to be somewhat light sensitive, 2,2'-thiobis(4,6-dichlorophenol) may darken slightly in alkaline media on extended light exposure but the stability work thus far indicates that neither time nor temperature have any effect upon the quality of formulations containing 2,2'-thiobis(4,6-dichlorophenol) or the product *per se*.

The ionization constants were determined by titrating a methanol solution potentiometrically and calculating the pK values from the pH values obtained. These constants, as re-

for Soap

and Chemical Properties (4,6-Dichlorophenol)

and M. C. Hunter**

Chemical Co., St. Louis

corded in Table IV, were checked by additional measurements in different methanol-water ratios and were found to be valid for aqueous media.

Being a phenolic compound, 2,2′-thiobis(4,6-dichlorophenol) will give a purple color when reacted with neutral ferric chloride and will give an oily top layer when titanium trichloride is added to an acetone solution. Since the chemical contains sulfur, it can be differentiated from the methylene bisphenols by the production of a black precipitate when fused with sodium and reacted with ferrous sulfate or lead acetate.

2,2′-Thiobis(4,6-dichlorophenol) can be assayed in soaps colorimetrically after reaction with 4-amino antipyrine (12,13). In the pure state, a potentiometric analysis is more accurate.

The product's very low vapor pressure will insure against vapor losses at elevated temperatures used in soap and other industrial processes. In addition, other physical-chemical properties such as solubility in organic solvents insures ease of formulation in many diversified industrial applications; the stability data assures against marked decomposition on extended storage; and the high pK_2 theoretically explains the bacteriostatic activity when formulated in alkaline media.

The *in vitro* antimicrobial activity of 2,2′-thiobis(4,6-dichlorophenol), designated as "Actamer," was tested against a wide spectrum of bacteria and in a medium composed of tryptose, dextrose, dipotassium phosphate and either beef extract or meat infusion. The medium was adjusted to pH 7.3 after sterilization and aseptically distributed in test tubes. A 10 per cent stock solution of "Actamer" was prepared with polyethylene glycol 400 as the solvent. Serial dilutions of "Actamer" were prepared in increments of ten and inoculated with 0.05 ml. of an aqueous suspension of the respective test organism. The results, as read after 48 hours incubation, are recorded in Table V.

From the results reported in Table V it is apparent that the bacteriostat is consistently effective against all of the gram-positive bacteria tested and is frequently effective against the

TABLE I

Solubility of Actamer in Aqueous Solutions

Aqueous Solution	Temp.	Solubility (gms./100 cc.)
Water	5°C.	0.0003
Water	25°C.	0.0004
Water	50°C.	0.0007
Water	80°C.	0.0018
Water + 1 mol NaOH	25°C.	0.29
Water + 2 mols NaOH		
0.2% NaOH	25°C.	0.7
0.4% NaOH	25°C.	1.3
2.0+ NaOH	25°C.	8.2
4.0% NaOH	25°C.	16.2

TABLE II

Solubility of Actamer in Organic Solvents

Solvent	Solubility (gms./100 cc. at 25°C. except where indicated)
Dimethyl acetamide	72.5
Polyoxyethylene sorbitan monooleate	19.0
Polyoxyethylene sorbitan monolaurate	19.0
Polyethylene glycol 200	16.0
Acetone	15.0
Amyl acetate	7.0
Lanolin	5.0* (42°C.)
Stearyl alcohol	5.0* (59°C.)
Pine oil	4.5
Castor oil	4.0
Cetyl alcohol	3.0* (50°C.)
Octyl alcohol	2.5
95% Ethyl alcohol	2.3
99% Isopropanol	2.0
Stearic acid	1.5* (70°C.)
Coconut oil	1.0
Corn oil	1.0
Dioctyl phthalate	1.0
Cottonseed oil	0.5
Olive oil	0.5
Propylene glycol	0.5
Turkey red oil	0.5
70% Ethyl alcohol	0.3
Benzol	< 0.2
Carbontetrachloride	< 0.2
Fuel oil No. 2	< 0.2
Glycerine	< 0.2
70% Isopropanol	< 0.2
Oleic acid	< 0.2
S.A.E. No. 10 Oil	< 0.2
Stoddard's Solvent	< 0.2
Toluol	< 0.2

* Solubilities determined at listed temperature (slightly above melting point of solvent).

TABLE III

Calculated Vapor Pressure of Actamer

Temperature	Vapor Pressure (mm. Hg.)
0°C.	4.2×10^{-13}
25°C.	1.1×10^{-10}
37°C.	1.1×10^{-9}

TABLE IV

Ionization Constants of Actamer

$K_1 = 1.52 \times 10^{-5}$	$pK_1 = 4.82$
$K_2 = 3.14 \times 10^{-11}$	$pK_2 = 10.50$

* Trade mark, Monsanto Chemical Company.

** Paper presented at 39th annual meeting Chemical Specialties Manufacturers Association, New York, Dec. 8, 1952.

gram-negative species. Particular note should be made of the activity shown against *Micrococcus pyogenes* var. *aureus*, representative of the most prevalent microorganism of the resident skin flora, and *Corynebacterium diphtheriae*, the type species of that large group of heterogeneous rods classified as diphtheroids which inhabit the deep pores and hair follicles of the skin and are frequently associated with acneform conditions (14). The exceptionally good activity against *Brucella abortus* was rather surprising in light of its occasional ineffectiveness against other gram-negative bacteria. Although "Actamer" did not inhibit the growth of *Pseudomonas aeruginosa*, it did alter the normal metabolism as was evidenced by inhibition of pigment production at a dilution of one to 10 million.

Bacteriostatic tests were also conducted using the same procedure in which soap was incorporated into the media in the ratio of one part "Actamer" to 50 parts soap. No perceptable difference in inhibiting concentration of "Actamer" against bacteria could be found.

The antifungal activity of "Actamer" was determined by incorporating various dilutions of the compound in Sabouraud's nutrient agar and then spot-inoculating this medium in the center of a petri plate with the test fungus. Such plates were incubated at 28°C. for 10 days before final readings were taken. It is apparent from Table VI that "Actamer" shows good antifungal activity against some of the pathogenic species like *Epidermophyton inguinale* and *Trichophyton mentagrophytes* but is less effective against most non-pathogenic fungi tested.

The efficacy of any compound as a skin antiseptic is dependent upon the antibacterial activity of the compound *per se* and the substantivity of the compound to the skin. The exceptionally good substantivity of "Actamer" was established by the results of hand-washing tests* carried out by the Cade modification of the Price technique (15). "Actamer" reduced the resident flora of the skin (based on the 5th basin counts) by an average of 97.4 per cent in a series of twelve subjects when it was incorporated at a 2.0 per cent level in a high-grade 20 per cent coconut oil — 80 per cent tallow bar soap. The per cent reduction was approximately 94 per cent when "Actamer" was tested in soaps at a 1.5 per cent level and still reduced the resident skin flora by almost 92 per cent at as low a level as 1.0 per cent in bar soap. Since soap containing hexachlorophene has been suggested (16) as a standard for estimating the efficacy of antiseptic soaps, comparable results with "Actamer" and hexachlorophene are portrayed graphically at 2.0 per cent levels in Graph No. 1 and at 1.0 per cent levels in Graph No. 2.

Chemical analysis of "Actamer" in 5th basin washings showed that there was insufficient agent washed off to effect bacteriostatic activity in the plate counts. For this reason no inactivating serum was employed in these studies.

It is apparent from these graphs that "Actamer" is exceptionally effective in all concentrations tested. The somewhat greater reduction of resident bacteria after 12 days and the slower return to a normal count can possibly be explained as due to a greater substantivity of "Actamer" to the skin, inasmuch as the material exhibits approximately the same degree of *in vitro* bacteriostatic activity as hexachlorophene.

TABLE V

Bacteriostatic Activity of Actamer

Test Organism	Dilution of Actamer in PPM					
	1000	100	10	1.0	0.1	C
Bacillus subtilis	—	—	—	—	+	+
B. stereothermophilus	—	—	—	—	—	+
Listeria monocytogenes	—	—	—	—	+	+
Lactobacillus casei	—	—	+	+	+	+
Mycobacterium sp.	—	—	—	+	+	+
Corynebact. diphtheriae	—	—	—	+	+	+
M. pyogenes var. aureus	—	—	—	—	+	+
Streptococcus faecalis	—	—	—	+	+	+
Diplococcus pneumoniae	—	—	—	—	—	+
Brucella abortus	—	—	—	—	—	+
Aerobacter aerogenes	—	—	+	+	+	+
Salmonella typhosa	—	+	+	+	+	+
Escherichia coli	+	+	+	+	+	+
Pseudomonas aeruginosa	+	+	+	+	+	+
Proteus vulgaris	—	—	+	+	+	+
Klebsiella pneumoniae	+	+	+	+	+	+
Erwinia caratovora	—	—	—	+	+	+
Cellulomonas cellulosi	—	—	—	—	+	+
Saccharomyces cerevisiae	—	—	+	+	+	+
Saccharomyces carlsbergensis	—	—	+	+	+	+
Zygosaccharomyces bailli	—	—	—	+	+	+

+ = Growth.
— = Complete inhibition of growth.

Pharmacology

THE acute oral toxicity of "Actamer" was determined for rats and rabbits by administering the material as a suspension in a 1.5 per cent aqueous methyl cellulose solution. In Table VII the acute oral LD_{50} for rats and the approximate lethal dose for rabbits are recorded.

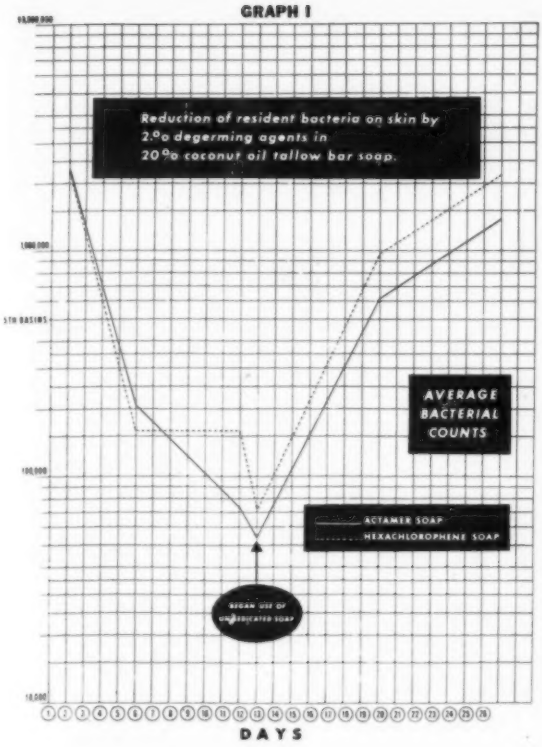
TABLE VI

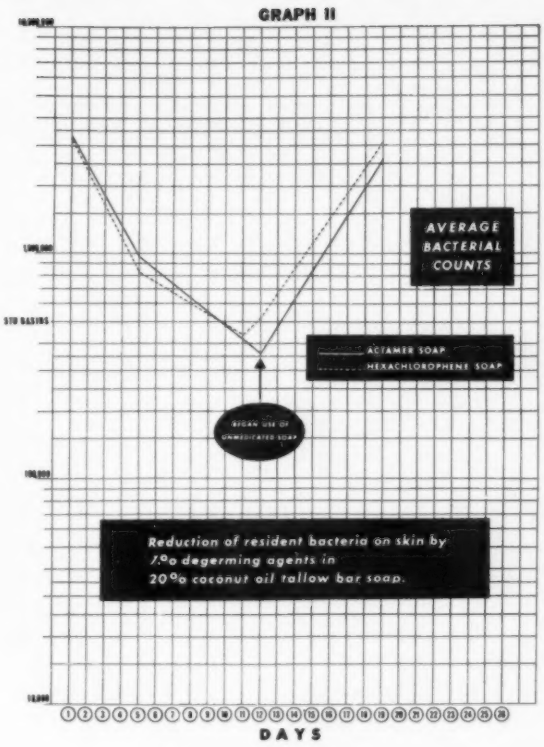
Fungistatic Activity of Actamer

Test Organism	Dilution of Actamer in PPM				
	1000	100	10	1.0	C
Trichophyton gypseum	—	—	—	+	+
Epidermophyton inguinale	—	—	—	+	+
Chaetonium globosum	—	—	+	+	+
Penicillium notatum	—	—	+	+	+
Penicillium citreum	+	+	+	+	+
Aspergillus niger	+	+	+	+	+
Lenzites trabea	+	+	+	+	+

+ = Growth.
— = Complete inhibition of growth.

* Carried out in part by Columbus Laboratories, Chicago, Ill.





In order to determine the cumulative toxicity sublethal doses were suspended in cottonseed oil and administered orally to rats for periods of 24 days. Data on this study are given in Table VIII. Results of both the acute and chronic toxicity studies show "Actamer" to possess a surprisingly low order of oral toxicity.

Irritation and sensitization studies were carried out on 200 human subjects by patch tests according to the technique recommended by Schwartz and Peck (16). The following three formulations were tested on each subject:

(1) 2% Actamer in a "Carbowax"* ointment base.
(2) 1% solution of "Ivory Snow"† in tap water.
(3) 1% solution of "Ivory Snow" in tap water + 0.04% "Actamer."

* Trade mark of Union Carbide and Carbon Corp., New York.
† Trade mark of Procter & Gamble Co., Cincinnati.

Each of the above samples was applied to a separate square of gauze and these gauze pads secured to the skin of the upper arm with standard Elasto-Patches. The patches were removed after either 24 (181 subjects) or 48 hours (20 subjects) and the skin was observed for possible reactions at that time and again after 24, 48, and 72 hours. Approximately ten days after the patches were removed, identically treated patches were reapplied to the same areas in the same manner. These second patches remained on the skin for either 24 or 48 hours (as mentioned above), and then the areas were again examined for irritation or sensitization reactions. In no case were primary irritation or sensitization reactions encountered which could be attributed to "Actamer."

Although described previously, the utility and applicability of "Actamer" as a becteriostatic agent for use on the skin is novel. Its potent antibacterial activity and excellent substantivity to the skin, coupled with indicated exceptionally low order of toxicity, offer a combination of properties that make it suited to many diversified fields of application where antimicrobial activity is desirable.

Foremost among these indicated application is "Actamer's" use in tropically applied products such as soaps and cosmetics. Much has been published in the last 15 years to show that the bacterial flora of the skin is made up of "transient" and "resident" forms. Most of the transient bacteria can be removed from the skin by a thorough cleansing with a non-medicated soap but the resident bacteria are much more difficult to dislodge.

The resident forms are found in

(*Turn to Page* 90)

TABLE VII

The Acute Oral Toxicity of Actamer When Administered to Rats and Rabbits

Rats		Rabbits
LD_{50}(Bliss) gm./kg.	Limits of LD_{50} gm./kg.	Approx. Lethal Dose gm./kg.
6.627	5.46—8.12	7.0

TABLE VIII

Cumulative Oral Toxicity of Actamer to Rats

Daily Dose mg./kg.	No. of Doses Given Each Rat	No. of Rats	Deaths %
100	24	12	8
200	24	12	8

Soap Anti-trust Suit . . .

JUST over two weeks after a Federal Grand Jury failed to return indictments on Nov. 25 in a criminal suit charging three soap companies, the Soap Association and A. C. Neilsen Co., Chicago, with violations of the anti-trust laws, a civil suit was instituted by the Department of Justice in the United States District Court of Newark, N. J., charging the three soap companies and the association with a combination and conspiracy in restraint of trade in household soaps and detergents.

The complaint lists as defendants Procter & Gamble Co., Cincinnati; Colgate-Palmolive-Peet Co., Jersey City, N. J.; Lever Brothers Company, New York, and the Association of American Soap and Glycerine Producers, Inc. They are charged with combining and conspiring "to restrain and monopolize interstate trade and commerce in the production of household soap and household synthetic detergents and in the purchase and sale of the principal raw materials used in soap and synthetic detergents in violation of Sections 1 and 2 of the Sherman Act."

The Government's 19 page complaint ends with a prayer that the defendants be "perpetually enjoined and restrained from continuing . . . the . . . violations" and that they be directed to dissolve "into separate and independent organizations, and that each defendant's plants and other assets for the production and sale of soap and synthetic detregents be divided among new organizations, so as to prevent continued monopolization and to restore competitive conditions."

In a statement issued by Colgate-Palmolive-Peet Co., Jersey City, N. J., E. H. Little, president, said his company "emphatically denies the charge." He also pointed out that "the soap industry has been and continues to be highly competitive."

"Lever Brothers Company has not violated the anti-trust laws, in letter or in spirit," Jervis J. Babb, president of Lever commented. "As every housewife knows, competition among companies in the soap and detergent business is extremely intense," Mr. Babb said. He also stated that "Prices of soaps and detergents have risen only half as much as the average of all consumer products since the 1935-39 period despite sharp increases in many costs."

Neil McElroy, president of Procter & Gamble, Cincinnati, said that "our reaction is one of astonishment at the unfairness of this action. We are completely guiltless of any wrong doing."

Mr. McElroy said "Procter & Gamble is going to fight these charges." He also stated: "After exploring tons of records and exploring every phase of our activity the (Federal Grand) jury found no cause for action against the company. We are amazed that in the face of this fact the government would want to bring this action . . . We are confident that the legal proceedings will prove that these charges are unfounded and unjust."

"The Procter & Gamble business has been built on a record of honesty and integrity. It has always been the policy of the company to comply with both the spirit and the letter of all Federal, States and local laws. We don't know how we could have been more meticulous in complying with all of these laws."

"Particularly are we certain that the company has not been a party to illegal arrangements of any kind having to do with restraining competition or attempting to monopolize. On the contrary, we have been operating in one of the most highly competitive industries that is in existence today."

"We think that the high degree of competition that does exist between the various soap companies is recognized by the grocery trade, the consumer and anyone else who comes in close contact with the industry. This vigorous competition has resulted in a fairly continuous flow of new products and product improvement which has benefitted the American people."

"The Procter & Gamble Company is proud of its record throughout its long history of serving the public through fair and enlightened business policies. These charges by the Department of Justice attack the integrity and good faith of the company and we do not intend to let them go unchallenged."

Commenting on the government action, George A. Wrisley, executive vice-president of Allen B. Wrisley Co., Chicago, and president of the Association of American Soap & Glycerine Producers, Inc., stated:

"The action of the Department of Justice in naming the Association of American Soap & Glycerine Producers, Inc., as a defendant in its suit charging restraint of trade in the soap industry is difficult to understand. As president of the association and as a member of the board of directors for many years, I would like to say that the association renders a broad industry service and that it does not serve the special interest of three companies, nor of any other segment of the industry, in any competitive matter. First of all, each member has an equal vote and since there are over 100 members, three votes obviously cannot control. Secondly, it has 15 members on its board of directors of whom only three are representatives of the three individual companies named as co-defendants in the suit. Thirdly, it does not carry on any activity in the pricing or marketing of soaps or synthetic detergents nor in the purchase of raw materials. It does encourage and promote cleanliness in all phases to the benefit of the public and all member

companies. It also promotes the use of glycerine which is largely a by-product of soap manufacture to the benefit of all producers of glycerine whether members of the association or not."

"The government has investigated the association twice; first in 1942 and recently in a Grand Jury Proceeding in Newark, New Jersey. Despite the subpoenaing of voluminous records including committee and board dockets and minutes, and the interrogation of subpoenaed witnesses, in neither case was there an indictment of the association. In my close relationship with the association and in my capacity as president of it, I firmly believe that the statements in the complaint referring to the association are unfounded and untrue."

The 19 page complaint is divided into six sections: "Jurisdiction and Venue" (I.); "The Defendants" (II.); "Nature of Trade and Commerce" (III.); "Offenses Charged" (IV.); "Effects" (V.) and a concluding section headed "Prayer".

The first section tells which sections of the Sherman Act the defendants are charged with violating and where their places of business are located. The defendant corporations, their organization, their subsidiaries and something about their functions is briefly touched upon in the second section.

The third portion of the complaint deals with the commodities made and sold by the defendant companies, defining soap, synthetic detergents and the raw materials used in their manufacture, as well as the percentage of the household soap market represented by soaps and synthetic detergents. Retail sales distribution and merchandising methods are also covered in this section. Pointing out that in 1951 total sales of household soap by all producers in the United States were approximately $430,000,000, the complaint states that the three defendant soap firms produced and sold approximately three-fourths of the national sales of household soap for each of the past 20 years. Of the 75 per cent, which the government charges was made and sold by Colgate, Procter and Lever, as they are referred to in the complaint, the 1951 totals were: Procter 40 per cent; Colgate, 14 per cent, and Lever, 21 per cent. In 1925, the percentages were 30, 27 and 9, respectively, for the three, which made their total 66 per cent of all soap sales for that year. The 1937 percentages are given as 40 for P&G, 18 for C-P-P and 22 for Lever for a total of 80 per cent. Ten years later the percentages were distributed for the three companies as follows: 37, 19 and 19.

Percentages of sales of synthetic detergents for the three companies for 1951 were shown as follows in the complaint: P&G, 69 per cent; C-P-P, 14 per cent and Lever, 10 per cent, or a total of 93 per cent of all synthetic detergent sales. In 1949, the figures were 66 per cent, 20 per cent and six per cent for the three firms, respectively, and in 1950, 67 per cent, 15 per cent and 11 per cent.

The complaint also states that:

"In 1951 there were, in addition to the defendants Procter, Colgate and Lever, not more than seven producers of household soap which sold as much as one per cent of all household soap sold in the United States and none of these seven sold as much as four per cent of the total. Each of these producers has been in the household soap business since some time prior to 1926. No producer who has entered the household soap business since 1926 has been able to sell even one per cent of the total household soap sold in any year. Of the producers of household soap who were in business in 1926 who are not in business today, the soap businesses of eight were acquired by Procter, one by Colgate (in addition to the mergers referred to in another paragraph of this complaint), and one by Lever.

"In 1926 there were no producers of household synthetic detergents. Today, in addition to Procter, Colgate and Lever, there are not more than two producers of household synthetic detergents who in 1951 sold as much as one per cent of the national total, and neither of these two sold as much as three per cent."

"The following table shows for 1951 the approximate amounts expended by Procter, Colgate and Lever for advertising and promotion of household soap and household synthetic detergents.

Procter	$74,000,000
Colgate	26,000,000
Lever	27,000,000
	$127,000,000

During the period 1936 through 1951, Procter, Colgate and Lever have used . . . more than three-fourths of the total inedible tallow and grease used for making soap in the United States. During the same period they have purchased about two-thirds of all the inedible tallow and grease available for use in the United States.

Offenses Charged

"BEGINNING in 1926 and continuing thereafter up to and including the date of the filing of this complaint, all the defendants have been engaged in a combination and conspiracy in unreasonable restraint of and to monopolize the aforesaid trade and commerce among the several states in the production and sale of household soap and household synthetic detergents in violation of Sections 1 and 2 of the Serman Act (15 U.S.C. Secs. 1 and 2). Defendants Procter, Colgate and Lever are now monopolizing and, for at least 15 years prior to the filing of this complaint, have continuously monopolized the aforesaid trade and commerce among the several states in the production and sale of household soap and household synthetic detergents in violation of Section 2 of the Sherman Act (15 U.S.C. Sec. 2). Defendants threaten to continue said offenses and will continue them unless the relief hereinafter prayed for in this complaint is granted.

"The aforesaid combination and conspiracy has consisted of a continuing concert of action among the defendants, the principal objectives of which have been:

"A. As to household-soap and household-synthetic detergents, that defendants Procter, Lever and Colgate

(1) Attain, maintain, augment, and exploit positions of dominance over all others engaged in producing and selling these products; and

(2) Restrict and control competition with each other and with all others engaged in producing and selling these products.

"B. As to the principal materials used in soap and synthetic detergents, that defendants Procter, Lever and Colgate

(1) Attain, maintain, augment, and exploit positions of dominance over all others engaged in the purchase

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Department of Justice renews its charges of anti-trust violations in civil suit against P&G, Colgate, Lever and Soap Assn. following failure of grand jury to indict

European and African

Essential Oil Outlook

By Dr. Ernest Guenther
Fritzsche Brothers Co.

THE following account of what has happened to the essential oil industry of Europe and Africa is based on a first-hand report by one of the world's leading authorities on the subject, Dr. Ernest Guenther, chief chemist and technical director of Fritzsche Brothers, Inc., New York. Dr. Guenther returned recently from a six months' trip covering more than 13,000 miles in France, Spain, Morocco, Algeria, Austria, Germany, Switzerland, Sicily and the Italian mainland. Ed.

THE once bountiful flower oil industry of Grasse is gradually declining and for the following reasons

(a) The high wages for cultivation work, picking flowers, etc., which is reflected in the high cost of the product.

(b) The ever increasing population of the Cannes-Grasse region with resultant real estate developments encroaching upon the flower fields.

(c) The development of the coastal region as a pleasure resort area which has brought with it a great demand for fruits and vegetables and even cut flowers. Farmers are making much more money supplying this demand than they could selling jasmine or rose flowers for perfume purposes. As a result, the acreage of the flower fields has been greatly reduced. Many of the older fields have been discontinued as no longer productive, so that today, one now has to look around and travel considerable distances to find them, whereas formerly there were large expanses of rose fields almost everywhere.

Meanwhile, in Sicily, Calabria, Algeria, Egypt and Morocco, the growing fields have been considerably increased, due largely to the fact that wages are lower and land is much cheaper. In addition, climatic conditions in these countries are excellent and there is less danger of frost. To cite one example, there is no necessity to hill up jasmine as a protection against frost in these countries in the late fall, whereas in the Grasse region this is necessary.

Still, the Grasse region does enjoy several advantages: 1. There they have the "know-how" in growing and in the methods of extraction. Hence, better qualities are produced.

2. The variety of floral products produced in the Grasse region is greater and this provides continuous work for the best part of the year.

3. Grasse manufacturers are well established with the Paris perfumers by personal connections, and they know precisely what the Parisienne market wants. Nevertheless, it is a declining industry and in another ten or fifteen years will be worse. Even today, there are really too many factories in Grasse for the available flowers and many of these could be closed. Some are seeking activity in other fields as, for example, in flavorings and pharmaceuticals.

Lavender and Lavandin

THE production of lavandin has increased tremendously during the last few years and very fine qualities of oil (containing up to 30% of esters) are being produced. This high quality originates from the variety of lavandin known as Abrial. In 1952 the total production of oil of lavandin was about 250,000 kilos. Oil of lavender production totaled approximately 40,000 kilos. A very interesting development in the lavender and lavandin region has been the introduction of the Eysseric and Prince stills which work much more rapidly than the old-fashioned types and save half the time while conserving half the labor.

The very beautiful and extensive lavandin fields, particularly in the Basses Alpes region are most impressive. On cultivation, lavandin gives a much higher yield of oil per acre. At the same time, the plantings are much hardier and live much longer than those of lavender. Growers today, therefore, are much more interested in cultivating lavandin than lavender.

New Morocco Developments

RECENT developments in Morocco are very significant. A group owning something like 1,000 acres in Morocco now has much of this under cultivation with geranium, jasmine and rose. These plantings were started shortly after the war and some of them have already come into full production. Others will be in full yield in about two years. All of the work is done according to the princi-

ples of modern agriculture and as much of it as possible is mechanized. It is a very interesting development to watch because if nothing unforeseen happens, Morocco may become a most serious competitor of the Grasse region. Such unforeseen factors as plant diseases, insect pests, and even political upheavals could, of course, interfere with this development. Morocco, after all, is a new country as far as the white man is concerned and very little is known about agricultural conditions in the various sections regarding aromatic plants. In other words, the present venture is a pioneering one and it will require the findings of a five-year average on any of these Moroccan undertakings to determine the productivity of the soil.

In the Dadés Valley in Morocco, the natives grow roses in hedges around their fields. These roses for centuries have been dried and shipped to various parts of North Africa for use in native medicines and beverages. They have even been exported to France and America. There are two extraction plants in the Dadés Valley for treating these roses but last May the whole crop was a failure because of a very strong frost and as a consequence no roses were available. This valley is located south of the High Atlas but at such a high altitude that in winter it is subjected to strong frosts.

Sicily and Calabria:

THERE have been impressive developments in Sicily during the last few years with regard to the production of jasmine concrete. Sicily and Calabria together produce now about 1800 kilos of concrete of jasmine per year. This new industry owes its development chiefly to the work of the Stazione Sperimentale in Reggio, Calabria.

Compared with the Grasse region, Sicily and Calabria offer many advantages in the cultivation of jasmine flowers, for example:

1. The flowering season lasts from June until November—much longer than in the Grasse region.
2. The labor available in Sicily and Calabria receives much lower wages than in Grasse where harvesters are paid 165 French francs (47 cents) per kilo of blossoms, as against the 135 Italian lira (22 cents) per kilo of flowers paid in Italy.
3. Hilling up the jasmine plants during the winter months as protection against frost damage is unnecessary in this region. On the other hand, water for irrigation purposes is more expensive in Sicily and Calabria than in Southern France, but altogether the odds are more favorable in Southern Italy than in Grasse. The heavy production of jasmine concrete in Southern Italy will undoubtedly be reflected in lower prices. It is true that in general the quality of the Italian concrete is not equal to that of the French but once the Italian producers have acquired the necessary "know-how" in cultivation, harvesting and extraction, the Italian product will be a most serious competitor of the Grasse jasmine concrete.

Citrus Industry of Sicily, Calabria:

WITH respect to citrus oil production in this region, there is little new to report except that in the case of lemon oil, hand sponging has been practically abandoned, all of the fruit now being processed for oil in Sfumatrici. Complaints registered in the United States during the last few years regarding the inferiority of Sicilian lemon oils reaching the overseas markets can be explained by the following:

1. No more handpressing is practiced in Sicily. This method yielded oils with a high citral content (about 4% in most cases). Even the best Sfumatrici used today produce lemon oils with a lower citral content, due to the fact that a part of the citral is lost in the spraying water.
2. Years ago, the region of Messina south to Santa Teresa was covered with high yielding lemon trees which produced a very fine quality of oil with a high citral content. All of these trees have now disappeared as a result of a disease—*Malo secco*. Of late, a new variety of tree has been planted, a small tree, resistant to the disease, the so-called Monachella which, however, produces lemons with a low content of citric acid and an oil with a very low citral content.
3. Widespread adulteration on the part of unscrupulous exporters—and even producers. Large quantities of badly adulterated Italian citrus oils appeared on the overseas market after the last war and this practice of adulteration has gravely undermined the reputation which the Sicilian oils formerly held.

Vapor Degreasing Trains

Vapor degreasing of diesel locomotive motors and generators at the Collinwood (Cleveland, O.) shops of the New York Central Railroad is described and illustrated in the December issue of *Du Pont Magazine*, external house organ of E. I. du Pont de Nemours & Co., Wilmington, Del. The recent installation of the vapor degreaser, using du Pont's trichlorethylene as the solvent, was necessitated by the switch from steam to diesel locomotives by the New York Central. The article, "Chemical Bath for Trains", points out that the trichlorethylene rises as a vapor from a 300-gallon tank set in the floor. The chemical condenses on the surface of motors and generators to be cleaned and then runs back into the tank carrying the dirt with it,—all in five or 10 minutes. There is also a spray attachment for particularly dirty parts.

Before the degreaser was installed according to the article, shop workers cleaned units by hand. It took two men about four hours to clean one generator housing and armature, and even then it was impossible to get at all of the inaccessible parts. The method is satisfactory and economical, according to the Central's maintenance heads, and flushes dirt out of places that can't be reached in any other way. The process also leaves motors and generators dry, ready for the next step in reconditioning.

Evaluation of Dishwashing Detergents

IN the development of a standard soil for dishwashing purposes, there is probably one primary decision which must be made; shall the soil be a predominantly fatty one, shall it be of a proteinaceous variety, or a combination of these. The lack of agreement on standardization of this item becomes apparent from Table V.

Fatty Soiling Agents. Fatty materials which may be encountered either in commercial establishments or in the home would be represented by fats from the cooking of meats, shortening agents, spreads such as butter or margarine and peanut butter. The last is a combination of both fatty and proteinaceous matter which is quite difficult to remove from a surface on which it has been spread. The commercial vegetable shortenings contain amounts of antispattering and emulsifying agents which sometimes affect detergency adversely and at other times assist in the removal of the fatty material present. Mineral oil has been used in some soiling compositions, but only occasionally is a natural constituent of soils.

Proteinaceous Soils. One of the most difficult materials to remove is dried egg and it is not surprising that it has been used in soils. Table V shows that raw, dried whole egg or dried egg yolk have been used. Peanut butter contains proteinaceous material which exhausts the detergent in a cleansing bath. Also included in this category is milk which has been used as whole milk, dried skim milk, butter milk, or as evaporated milk. Dry milk-stains are likewise difficult of removal.

Starch Soils. Wheat, corn and other flours as well as wall paper paste have been used for this purpose. Sometimes these have been used in combination with fats, or have been combined with water to make a paste, and then further incorporated with the general soil before application to the surface to be cleansed.

Diluents. For a greasy soil, ordinary fat solvents are used, while for proteinaceous or starch-type soils, distilled water has been used. Choice of a diluent will depend upon the soil

Table V

Soiling Compositions

Investigators (Ref. No.)	4	5	6 A	6 B	7	8
Soiling Agents						
Peanut Butter	See		10 gm.	50.0 gm.	2 pts.	
Lard	Ref. 6		10 gm.	25 gm.		
Butter	Except		10 gm.	25 gm.	1 pt.	
Tallow	Test					
Hydrog. Tallow	Organism					
Hydrog. Veg. Shortening					1 pt.	
Refined Mineral Oil				20 gm.		
Wesson Oil						
Dried Egg Yolk						
Dried whole egg						
Soft Boiled egg						
Raw Egg			50 gm.			
Flour						
Corn Starch flour						
Wall paper paste						
Milk		100%	10 gm.			100%
Evaporated Milk						
Calcium hydroxide						
Aluminum hydroxide						
N/1 sodium hydroxide						
Carbon Tetrachloride						
Xylol				20 gm.		
Distilled Water						
Lampblack						
India Ink						
Printing Ink & linseed oil						
Test Organism suspension	10 ml.					
Ferric Chloride ($FeCl_3$)						
Preservative						
Aging of applied soil	30 min. at R.T.		3-5 min.	3 min. at 110°C	none	5-10 min.

By Jay C. Harris
Central Research Department
Monsanto Chemical Company
Part II

in question; diluents are generally removed from the soiled surface prior to actual dishwashing tests.

Tracer Agents. In the preparation of a soil for dishwashing purposes, or for that matter for any other test in which an evaluation of soil removal is to be made, it is necessary that a tracer compound be used; these are included frequently in the soil itself.

The kind of tracer compound used will depend upon the equipment available for estimation. For example, since reflectance is one method which has been used satisfactorily, a material such as lamp black or India ink has been used as the tracer, which when removed in whole or in part, will indicate the efficiency of the cleansing operation.

Another means for estimation of cleanliness, particularly where bacteriological cleanliness of the dishes is required, is to combine in the soil a suspension of test organism. Here it is possible to determine both actual cleanliness by estimation of soil removal by one of the reflectance or transmittance methods, with a supplementary indication of bacteriological cleanliness by swab technique and culture of the bacteria removed from the washed surfaces.

Another method is to include ferric chloride in the soil, then after the washing operation to dip the cleaned surface in an ammonium sulfide solution. The ferric sulfide retained on the soiled surfaces is dark and can be measured photographically or photometrically.

A more recent method for estimation of cleanliness is use of fluorochromatic dyes which may be the same dyes used in synthetic detergent manufacture to produce a brightening effect. These dyes are colorless, are chosen for their preferential adsorbtion by unremoved food particles and fluoresce under ultraviolet light. For this test the washed dishes are dipped in a solution of the dyestuff, rinsed, dried, and observed under ultraviolet light for visual indication of cleanliness or redeposition of soil.

Still a further method for estimation of cleanliness involves a radioactive tracer technique. One example has been the use of a bacterial suspension of test organism that has been grown on a radioactive P_{32} nutrient medium thus making the organisms themselves radioactive. Another way to use this technic is to develop a radioactive soil as was done in metal cleaning.

These methods offer extremely sensitive techniques for estimation of soil removal (or retention); they are, however, more applicable to research than to normal laboratory, or one-the-spot plant evaluation technique.

Preservative. It is possible to add a preservative to certain of these soiling compositions so that they will retain their initial characteristics. This has also been accomplished by refrigeration. Frequently it may be necessary

(*Turn to Page 77*)

9 A	9 B	10 A	10 B	11	13	14	15	16 A	16 B	17
			20 gm.	10 gm.	See	35 gm.		1.0 lb.		See
			10 gm.	10 gm.	Ref.			0.5 lb.	2.0 lb.	Ref.
			10 gm.	10 gm.	No. 11			0.5 lb.		No. 11
									2.0 lb.	
37.5 gm.										
125 gm.			10 ml.							
							50 gm.			
			40 gm.	10 gm.		120 gm.				
	5.0 gm.									
							50 gm.			
	5.0 gm.		40 gm.	10 gm.		120 gm.	50 gm.			
		17 gm.	17 gm.							
						52 gm.				
	50 gm.		40 gm.	15 ml.		210 gm.				
								25 gm.		
	15 cc.									
				3 ml.						
95 cc.										
	550 cc.	265 ml.	455 ml.	50 ml.		ca. 460 ml.	300 ml.			
5.0 gm.			2.0 gm.							
	5 cc.	10 ml.	20 ml.	4 ml.		7-10 ml.				
				10 drops						
		15 ml.								
									75 gm.	
				1.0 gm.						
Air dried	16 hrs. at 55°C	None	None	1 hr. at 95°		37°C overnight	None	None	30 Min.	1 hr. at 95-97°C.

New "Dip-In" tarnish silver cleaner of Leo R. Leary, Buffalo, N. Y., manufacturers of Patrick sanitary chemicals, comes packed in eight ounce, 24 ounce and gallon bottles. Instructions for using new silver cleaner call for dipping pieces to be cleaned into preparation for two seconds, removing and rinsing promptly with hot or cold water and drying.

"Hx" new antiseptic and germicide concentrate, is now being distributed by Lucas Products Corp., Toledo. The product is distributed through wholesale drug distributors in Ohio, Indiana and Michigan. Twelve-ounce "Duraglas" bottles and white plastic closures are manufactured by Owens-Illinois Glass Co., Toledo; labels by Wheeler Van Label Co., Grand Rapids, Mich., and individual carton by Spitzer Paper Box Company, Toledo.

Newest addition to the line of household chemical specialties of Twin-City Shellac Co., Brooklyn, is "Dan-Dee Dip Instant Tarnish Remover." Retailing for 79 cents for eight ounce bottle, the new cleaner can be used for silver, gold, brass and copper. The re-use feature of the new product, which is said to be especially effective for large pieces with engraving and other grooves, is emphasized.

What's New?

"Velvetone" aerosol dust mop treatment was announced recently by National Disinfectant Co., Dallas. A five-second spray is said to be sufficient to transform an ordinary dust mop into a dust absorber. Product is also recommended for use on dust cloths, and for spraying directly on furniture, followed by wiping with clean rag.

Wildroot Co., Buffalo, N. Y., is now using "Selmor" merchandise vendor to display and sell its liquid cream "Lady Wildroot" shampoo. Manufactured by Hinde & Dauch Paper Co., Sandusky, O., the new corrugated display stand accommodates three sizes of the shampoo. Printed in red and blue on white board, it gives the appearance of a multi-color job.

New and old packages for "Mione" powdered hand soap of Mione Manufacturing Co., Collingdale, Pa. Major change in the package is addition of yellow bands around top and bottom of package and reverse trade name cut on the top of the package.

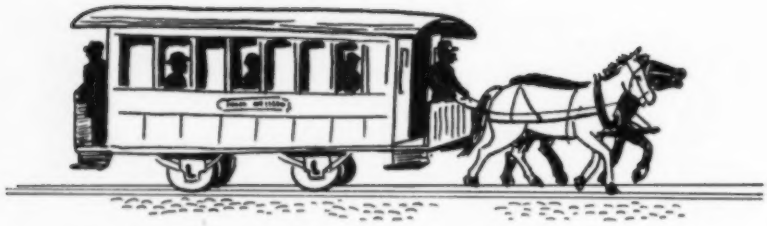
First promotion of the new year for Yardley, New York, is a special soap package, containing four cakes of English lavender soap for $1.35. Calling attention to the special package is the slogan on the outer lid of the package, "One Extra for Good Luck." The message is repeated on soap wraps.

New portable insecticide vaporizing home unit of Columbia Chemical Co., Chicago, features the use of "Metho-Nox" (99 percent pure methoxychlor processed especially for vaporization) as the insecticidal ingredient. The company is stressing the safety of methoxychlor for use in the new household vaporizer.

☆ ☆ ☆

Aerated isopropyl rubbing alcohol in new, clear bulb neck "Duraglas" bottle of Owens-Illinois Glass Co., Toledo, has been added recently to the line of Lady Claire Laboratory, subsidiary of K. B. Chemical Co., Pawtucket, R. I., chemical specialties manufacturing firm. Label by Fenton Label Co.

Celebrity, Inc., is introducing new plastic squeeze bottles in a family of cartons designed and made by Robert Gair Co., New York. "Foiline" and "Plastafol" packaging materials of Gair are combined in a bright carton with clear window to show bottles for shampoos, bubble bath and other toiletries.



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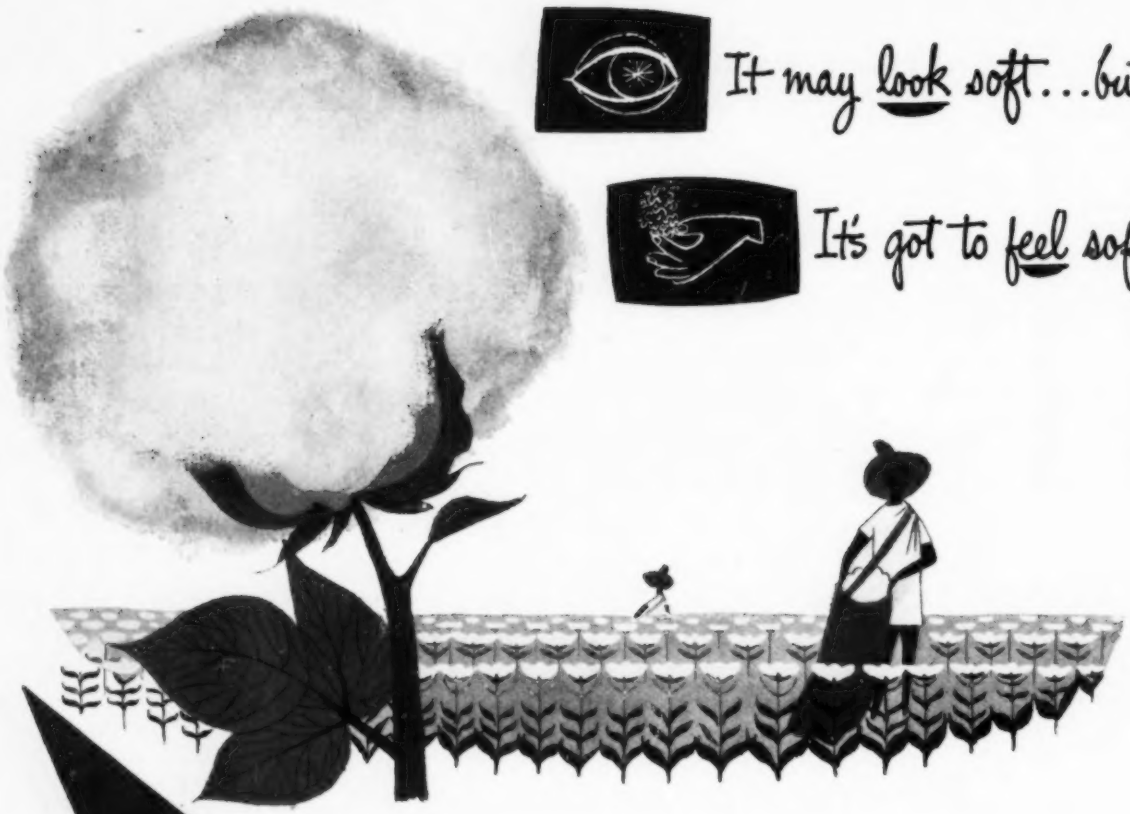

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ARMOUR

Industrial Soap Department

News

Wyandotte Ups Schwarz

George W. Schwarz, since 1948 vice-president-controller of Wyandotte Chemicals Corp., Wyandotte, Mich., has been advanced to the position of vice president and treasurer, it was announced recently.

GEORGE W. SCHWARZ

Ford Ballantyne, Sr., who had been handling the functions of treasurer, will continue to serve as vice-president and secretary of the company.

Mr. Schwarz, a certified public accountant, joined Wyandotte as controller in 1938.

Oronite Names Burge

The naming of W. M. Burge as manager of chemical sales in the New York district for Oronite Chemical Co., New York, was announced recently by H. E. Bramston-Cook, eastern vice-president.

Gumpert of Babbitt Resigns

L. James Gumpert recently resigned as vice-president in charge of sales of B. T. Babbitt, Inc., New York. He had been with the firm for 41 years, starting as a retail salesman in 1911, and being vice-president and director of sales since 1940. After joining Babbitt as a retail salesmen, he later advanced to the post of district manager for metropolitan New York and Philadelphia. He was appointed director of sales in the early Thirties and in 1940 was named to the board of directors. In addition to his other duties, Mr. Gumpert served on the board of the Grocery Manufacturers Association. It is understood, Mr. Gumpert, who is 60, plans to retire. Acting as director of sales until a successor to Mr. Gumpert is appointed is Samuel Mendleson, president of Babbitt.

Clark Joins Gillam

Gillam Soap Works, Fort Worth, Tex., recently announced that Harold Clark, formerly of Memphis, Tenn., had joined the firm. Mr. Clark holds a B.S. degree in chemistry.

Pickett Joins Stepan

The appointment of Wiley J. Pickett as eastern sales manager for Stepan Chemical Co., Chicago, was announced recently. Mr. Pickett is making his headquarters at the company's new eastern office, 33 W. 42nd St., New York. A 1939 graduate of the University of New Hampshire, Mr. Pickett joined Victor Chemical Works, Chicago, that same year. He was also with Colgate-Palmolive-Peet Co., Jersey City, N. J., where he did technical service and sales promotion work. More recently Mr. Pickett was with U. S. Industrial Chemicals, Inc., and prior to joining Stepan was with American Alcolac Corp., Baltimore.

WILEY J. PICKETT

Lever Names Black

William P. Black has been appointed to the newly created position of industrial detergent sales manager of Lever Brothers Co., New York, it was announced late last month by William H. Cochrane, general manager of the company's industrial sales division. Mr. Black joined Lever Brothers Co., at Cambridge, Mass., in 1938 and has served in various sales and administrative capacities since that time. A native of Boston, Mr. Black now resides in New York.

WILLIAM P. BLACK

C-P-P Shifts Plant Heads

H. R. Hughes, formerly superintendent of the Jeffersonville, Ind., plant of Colgate-Palmolive-Peet Co., Jersey City, N. J., was recently transferred to the home office engineering division in Jersey City and placed in charge of the plant engineering department.

F. L. Stephens, formerly plant superintendent in Kansas City, has been transferred to Jeffersonville as plant superintendent.

A. R. Tucker, who has been in the Colgate home office, has been transferred to Kansas City as plant superintendent.

Mr. Hughes joined Colgate in 1940 in Jersey City and has been plant superintendent at Jeffersonville since 1943. Mr. Stephens, who has been with

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Cowles DRYMET, anhydrous sodium metasilicate, is the most highly concentrated form of sodium metasilicate available. DRYMET contains no water of crystallization. One pound of DRYMET is equivalent to 1.6 lbs. of sodium metasilicate pentahydrate. It is more economical to use, on the basis of both Na_2O (alkalinity) and SiO_2 (silicate) than any other type of hydrated or anhydrous detergent silicate, either compounded or by itself.

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Cowles DRYORTH, anhydrous sodium orthosilicate, is a powerful, speedy, heavy-duty cleaner with valuable penetrating and wetting-out properties, reinforced dirt-removing power and unusual emulsifying action. It is an anhydrous, free-flowing powdered silicate containing not less than 60% Na_2O. DRYORTH is also used as an economical constituent of high pH cleaning compounds.

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Colgate since 1935, was named Kansas City plant superintendent in September, 1947. Mr. Tucker started with the firm at its Jersey City plant in 1937.

Bates Solvay Exec. V.P.

Appointment of Carlton Bates as executive vice president of Solvay Process Division, Allied Chemical & Dye Corp., New York, was announced last month by A. B. Chadwick, Solvay president. Mr. Bates was appointed a vice-president of Solvay in July 1951. He continues to make his headquarters at Solvay's executive offices in New York City.

Pepsodent Ups Peterson

Alph B. Peterson, merchandising manager for the Pepsodent Division of Lever Brothers Co., New York has been promoted to the newly-created position of merchandising vice president for the Division, it was announced recently by Charles T. Lipscomb, Jr., president of Pepsodent. Mr. Peterson started with Lever Brothers as a messenger in Cambridge, Mass., in 1934. Since that time, he held successive positions as junior salesman, salesman, market researcher, sales administrator, general field supervisor and finally division sales manager in the Lever Division of the company.

In October, 1950, Mr. Peterson was named assistant sales manager for the Pepsodent Division. The following year he was promoted to merchandising manager, a position he held until his present advancement to merchandising vice president.

A. B. PETERSON

Horner McKelvy Exp. Mgr.

The naming of Lawrence E. Horner as export manager of Alfred D. McKelvy Co., makers of Seaforth

LAWRENCE E. HORNER

men's toiletries, and Prince Matchabelli, Inc., toiletries, cosmetics and perfumes, two subsidiaries of Vick Chemical Co., New York, was announced recently. The announcement was made jointly by L. F. Bonham and Owen Stoner, presidents, respectively, of McKelvy and Matchabelli.

Mr. Horner received an M.A. degree from Columbia University in 1946, following which he joined Seaforth as a salesman in the South. In 1948 he was also assigned the same territory for Prince Matchabelli. Since 1950 he has been assistant export manager of both firms.

Werner Heads P. R. Group

William G. Werner, director of public relations for Procter & Gamble Co., Cincinnati, took office as president of the Public Relations Society of America at a meeting held in Cincinnati, Dec. 10. He was elected president of the society a few weeks earlier.

Norda Names Reps.

Norda Essential Oil & Chemical Co., New York, recently announced appointment of A. W. Horton Co. as its representative in Mexico and the Philippines, and of Ken Rickard as its Southern California manager with headquarters in Los Angeles.

Mr. Horton plans to staff branch offices carrying complete warehouse stocks with native representatives in each of the countries he represents. Mr. Rickard, who has been with Dodge & Olcott for the past fifteen years, will also be representing Norda's interests in the Southwest.

John Buslee Dies at 66

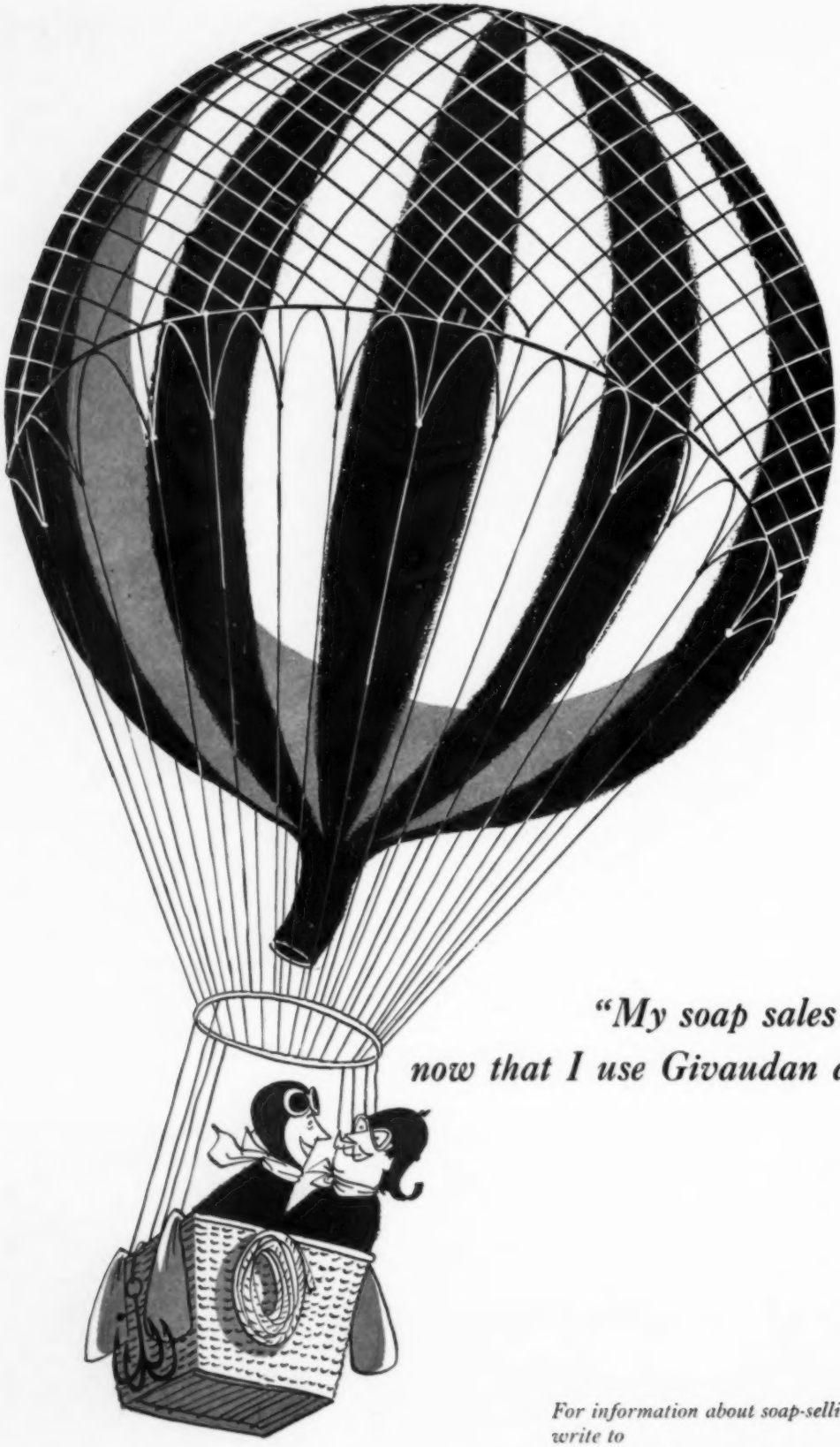
John Buslee, 66, president of Neumann, Buslee & Wolfe, Inc., Chicago, essential oil firm, died Dec. 5, at St. Francis Hospital, Evanston, Ill. One of the founders of Neumann, Buslee & Wolfe in 1920, Mr. Buslee was vice-president and secretary of the company until the retirement in 1944 of John H. Neumann, when he became president, a post he held until his death. Mr. Buslee was a native of Chicago and began his career at an early age with M. L. Barrett Co., an essential oil firm. Later he worked for National Aniline and Chemical Co.

Mr. Buslee was a member of the Chicago Drug and Chemical Association and the Essential Oil Association of the United States. He is survived by his widow, Olga, and a daughter.

Coneybear to C-P-P

The appointment of S. F. Coneybear as associate director of the research and development department of Colgate-Palmolive-Peet Co., Jersey City, N. J., was announced last month. The appointment of Mr. Coneybear is part of a major expansion of Colgate's research and development program. Mr. Coneybear was vice-president and development manager of Evans Research and Development Corp., New York, for many years prior to joining Colgate-Palmolive-Peet Co.

S. F. CONEYBEAR



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Bruun Hooker Research Hd.

Dr. J. H. Bruun, for the past 10 years in various executive and managerial capacities with General Aniline and Film Corp., New York, recently joined Hooker Electrochemical Co., Niagara Falls, N. Y., as director of research. With Hooker he is in charge of all research activities including basic research, pilot plant development and product application.

J. H. BRUUN

Hooker is planning an expanded program of research, which includes the construction of new centralized research laboratories.

Dr. Bruun, who has been responsible for considerable research leading to the development, commercial production and sale of many types of chemicals including surface active agents, had been manager of the research division of Sun Oil Co. from 1932 to 1942. Prior to this he was a senior research associate in the National Bureau of Standards from 1927 until 1932. Previously he was production superintendent for American Aniline Products for three years. He is a graduate chemical engineer of the Norwegian Institute of Technology and holds a Ph.D. degree in physical and organic chemistry from Johns Hopkins University.

New C-P-P Soap

The introduction of a new soap, "White Eagle", made especially for use in side loading washers in quick-service laundries, was announced recently by Colgate-Palmolive-Peet Co., Jersey City, N. J. Said to be more economical because of increased efficiency, "White Eagle" provides controlled scum and suds for improved cleaning action and reduces lime soap graying and specks, the maker claims. In addition, because it contains a brightening agent, it is said to give cotton washes claimed to be whiter and brighter. Its absence of dust is also being emphasized by the maker, as is its complete and easy rinsability. "White Eagle" is sold in 100 pound bags. A folder describing the new soap, its properties and uses is available by writing the industrial department of the company at 105 Hudson St., Jersey City 2, N. J.

Martin Cowan Retires

Martin I. Cowan recently announced his resignation as secretary and treasurer of Consolidated Products Co., Inc., New York, and his retirement from the firm. He had been affiliated with the firm, dealers in machinery and plant equipment, for thirty years. His son, Robert C. Cowan, will continue to serve as sales engineer with Consolidated.

Mr. Cowan plans to continue his association with the chemical and allied processing industries as a consultant, advisor and appraiser.

New Magnus Cleaner

Magnus Chemical Co., Garwood, N. J., recently announced the introduction of "Magnus Cob Hand Cleaner," an addition to its line of hand cleaners. The new cleaner is a light weight, free-flowing powder containing corn cob meal as the abrasive. It is suggested for use by female employees or those desiring a cleaner with a soft, mild abrasive.

"Magnus Cob Hand Cleaner" contains lanolin and the toilet grade soap used is of mild (pH 7.5) alkalinity. It produces a good lather, and rinses readily.

The new Magnus cleaner is sold in bulk only, in 185 and 90 pound drums. A free sample will be supplied upon request on company letterhead. Send requests to Magnus Chemical Co., Garwood, N. J.

New Robinson-Wagner Unit

Construction of a new manufacturing unit estimated to cost approximately $170,000 was begun Dec. 8 at the Mamaroneck, N. Y., plant of Robinson-Wagner Co., New York, according to a recent announcement by A. Wagner. The new addition is scheduled for completion and expected to be in operation during May, 1953. It will include complete facilities for esterification, high vacuum distillation and condensation reactions, involving the synthesis of a series of new products developed by Robinson-Wagner research.

Am. Potash Post to Francis

Appointment of William J. F. Francis as general sales manager, western, of American Potash & Chemical Corp., was announced recently by William J. Murphy, vice-president in charge of sales. Mr. Francis succeeds David B. Scott, who retired Dec. 15, after 18 years in charge of the company's sales office in Los Angeles.

A graduate of the University of California at Berkeley, where he also received his master's degree in entomology, Mr. Francis was with California Spray Chemical Co., Richmond, for six years, advancing from field representative to district sales manager. In 1943 he joined Pennsylvania Salt Co., Philadelphia, as technical sales representative in the State of Washington. In 1945, he became assistant sales manager, and western sales manager the following year. At the time of his resignation he was manager of the agricultural chemicals division and general sales manager of the special chemicals division.

Completes New Plant

Completion of new and larger manufacturing facilities in Teterboro, N. J., was announced recently by Polak & Schwarz, New York. The firm will maintain the old factory site in Guttenberg, N. J., as a supplementary plant and warehouse.

Givaudan Honors Veterans

Six employees of Givaudan-Delawanna, Inc., New York, who had completed twenty-five years of service with the company, were presented with gold Swiss watches at the company's annual Christmas party at the Swiss Chalet, Rochelle Park, N. J., Dec. 20. New veterans, who joined 29 previously honored, were Michael German, Wilhelmine Kramer, Michael Lazorchak, Meeuwis Mol, Herbert L. Shaftoe and Albert Szeredy.

The party, attended by 340 employees of the Givaudan organization, was addressed by Ernest R. Durrer, executive vice-president, Dr. Max Luthy, vice-president and plant manager, and Harold F. Duffy, treasurer.

New Ninol Emulsifiers

Ninol Laboratories, Chicago, recently announced the addition of two new members to their series of "Toximul" emulsifiers. "Toximuls 300" and "400" are both anionic type emulsifying agents designed to cover a broad range of chlorinated toxicants between them. "Toximul 300" is recommended for toxaphene, chlordane, DDT, 2,4D and aldrin, while "Toximul 400" is preferred for BHC, lindane, dieldrin, parathion and 2,4,5T.

Features of these two new emulsifiers are flash dispersibility when poured into water, slow creaming rates, and low cost.

Copies of Bulletin A-2, which describes the new emulsifiers, are available on request.

ADACIOM Elects

The Associated Drug and Chemical Industries of Missouri recently held its 14th annual election of officers and directors at a luncheon meeting on Dec. 3, at the Hotel Lennox, St. Louis. Among the officers and members of the executive committee, all of whom serve as directors, elected, were: second vice-president Gerald F. Pauley, Monsanto Chemical Co.; third vice-president, Joseph W. Wise, Grove Laboratories, Inc., and these members of the executive committee: Arthur O. Hoeller, James Varley & Sons, Inc.; E. Ted Mann, Dow Chemical Co.; L. G. Peck, Peck's Products Co., and A. L. Saeks, Puro Co.

Left to right at presentation of gold watches to 25-year employees of Givaudan-Delawanna during recent annual Christmas party were: Col. Herbert Shaftoe of the Cincinnati office; Michel German, Ernest R. Durrer, executive vice-president; Dr. Max Luthy, vice-president and manager of the Delawanna plant; Harold F. Duffy, treasurer; Miss Wilhelmine Kramer; Michael Lazorchak; Meeuwis Mol, and Albert Szeredy.

BIMS Dinner Jan. 29

The annual dinner of the BIMS of New York will be held Thursday, Jan. 29 at the New York Athletic Club, it was announced recently by Peter L. Forsman of C. H. Forsman Co., New York, chairman. Cost of the dinner, which includes entertainment, is $12.50 per person. Members may bring guests for this only winter get-together of BIMS.

C-P-P Pays Bonus

E. H. Little, president of Colgate-Palmolive-Peet Co., Jersey City, N. J. recently announced that the board of directors voted to pay one week's salary on Dec. 19 to all employees who were actively at work for the company on Dec. 1, who are not on a regular commission or bonus plan, and who have worked the equivalent of 12 months during the 18 months immediately preceding December 1.

Employees on leave in the armed services and those who formally retired with the consent of the company during 1952, who have met the necessary employment qualifications, will likewise receive one week's salary.

In New Lever Post

The appointment of Luther Conant, Jr., as product publicity manager, a new position, was anounced recently by Lever Brothers Co., New York. He was formerly senior client expeditor for Edward L. Bernays, New York public relations consultant.

Hardesty Merger

Hardesty Chemical Co., New York, has just been merged into W. C. Hardesty Co., New York, and will operate henceforth as the Hardesty Chemical Division of W. C. Hardesty Co.

The firm will operate from its present headquarters at 41 East 42nd Street, New York. Howard M. Abbott, vice-president of Hardesty Chemical Co., has been appointed vice-president of W. C. Hardesty Co., Inc.

New sales representatives of Gourielli, Inc., New York, were honored at a recent cocktail party held at the home of Prince and Princess Artchil Gourielli, New York. Left to right are: Claude Sartorius, Jr.; Blake Conley; Eugene Coe; George S. Carroll, sales manager; Prince Artchil Gourielli, co-founder of Gourielli, Inc.; Oscar Kolin, vice-president; William R. Tenney, Jr.; Maurice J. Tritter, and Jack N. Harp.

savings in synthetic detergent formulas

Use PQ Silicates to improve synthetic detergents' performance at a saving. In formulating your synthetic-builder mixtures you can count on the action of PQ Silicates to step-up soil removal, to prevent dirt re-deposition and to protect metals from attack by synthetics.

Yes, it's better detergency with worth-while savings because PQ Silicates are basically lower priced than straight synthetic detergents.

PQ Silicates are available in solutions and powders. For additional information on the right silicate for your formulas, call on PQ Silicate Headquarters.

PHILADELPHIA QUARTZ COMPANY
1152 Public Ledger Bldg., Philadelphia 6, Pa.

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silicates of soda

Dermatologists on Hand Cleaners

INDUSTRIAL dermatosis was among the topics discussed at the 11th annual meeting of the American Academy of Dermatology and Syphilology in Chicago, recently. Several manufacturers of medicated soaps and preparations for skin treatment were among exhibitors at the meeting.

In his paper on "Geriatric Dermatoses," or skin troubles common in persons over 50, Dr. Melvin L. Grais, also of the Univ. of Minnesota, explained that as people advance in age certain changes occur in their skins which make them increasingly sensitive to alkaline soaps and water. This problem he has met by ordering them to discontinue use of soap and water and use instead a new product, colloidal oatmeal. This he described as a gummy fraction of ordinary oatmeal which cleanses the skin without injury and leaves a protective coating on it.

Dr. Bart M. James of St. Michael's Hospital, Newark, N. J., in a paper on "Industrial and Occupational Dermatoses," charged that "a lot" of occupational dermatoses are produced by hand cleaners used by workers. Many of these cases can be avoided if milder cleaners are used, he stated.

"In some cases," he added, "protective ointments and creams are commercially available. But it must be remembered that these, too, may be sensitizers."

Supporting this claim, he reviewed a group of cases referred to him for severe dermatitis occurring as a result of "over-treatment", or from treating minor abrasions with known sensitizers.

Dr. James also cautioned the physicians to learn to recognize psychopathic, neurotic and emotionally unstable industrial workers who might produce self-inflicted dermatoses, either to obtain sympathy or to claim compensation. He told of several such cases he had observed.

Insecticides sprayed on clothing hung in closets can cause dermatitis, another specialist, Dr. Louis Schwartz, independent consultant of Washington, D. C. and formerly with the U. S. Public Health Service, made known in a paper on "Dermatitis From Fabrics."

"Cases of dermatitis are not infrequent," said Dr. Schwartz, "in households where aerosol bombs containing DDT, pyrethrum, rotenone, lethane, chlordane, etc. are sprayed into closets or directly on clothing. Most of the dermatitis from anti-mildews used on fabrics has been reported from their use in shoe linings."

Dr. Schwartz also asserted that "Sometimes dermatitis attributed to a fabric may be caused by dry cleaning chemicals, bleaches, strong washing powders and detergents, which may remain in the fabric after laundering. Certain after-rinses used in laundering (mercuric compounds, cationics) to make the fabrics antiseptic may also cause sensitization dermatitis."

In the Palmer House Exhibition hall Stiefle Medicinal Soap Co., Oak Hill, N. Y., featured two soap products, "Oilatum" soap and "Acne-Aid" detergent soap, also a tar shampoo and a tar and oil shampoo. The company originated in Germany, but 106 years ago, in 1847, began manufacture of its products in the United States, according to Werner K. Stiefel, vice president and a fifth generation executive of the concern. His father, A. C. Stiefel, who is president, represents the fourth generation of the family which has continuously operated the company for over a century, he said.

John H. Breck, Inc., Springfield, Mass., showed their industrial protective hand creams, three shampoos for oily, dry and normal hair, and a new line of "Baby Breck" preparations. These include a mild, gentle liquid for washing babies, a urine-resistant cream to prevent diaper rash and urine scald, and "Breck Mother and Baby Soap", containing lanolin for delicate skins and sensitive complexions. For the Christmas holiday season a special gift package of the "Baby Breck" line was offered. Harold Boehle, Chicago district manager, was in charge.

Aveeno Corp., New York, displayed their "Aveeno" colloidal oatmeal preparation, whose use in treatment of geriatric dermatoses had been discussed during the convention by Dr. Melvin L. Grais. In charge of the presentation was Sidney Musher, vice-president.

Procter & Gamble Co., Cincinnati, had a display of "Ivory" soap with a presentation emphasizing its use on babies. Leaflets were offered carrying instructions for handling patients for use by doctors.

Westwood Pharmaceuticals, Buffalo, N. Y., featured a new and improved "Lowila" detergent "soapless" cake whose low sodium content, according to R. R. Johnson, sales manager, makes it "the mildest known detergent."

J. B. Williams Co., Glastonbury, Conn., participated in the show, mainly to present their "Skolex" sun allergy cream to the skin specialists, Wm. E. Neagle, sales manager, said. When applied to the skin, he explained, it is "virtually impenetrable to the ultra-violet rays of the sun which cause sunburn." Also displayed were other familiar products, including Williams shaving soaps, "Aqua Velva" after shave lotion, "Conti" castile soap shampoo and "Kreml" hair tonic. Manufacture of this latter product, Mr. Neagle said, was taken over by Williams in May, 1952.

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Felton Moves Baude

Jean-Paul Baude, a member of the technical staff of Felton Co., Versailles, France, has been transferred to Felton Chemical Co., Inc., Montreal, Canada, it was announced recently. The French firm is a subsidiary of Felton Chemical Co., Brooklyn, N. Y.

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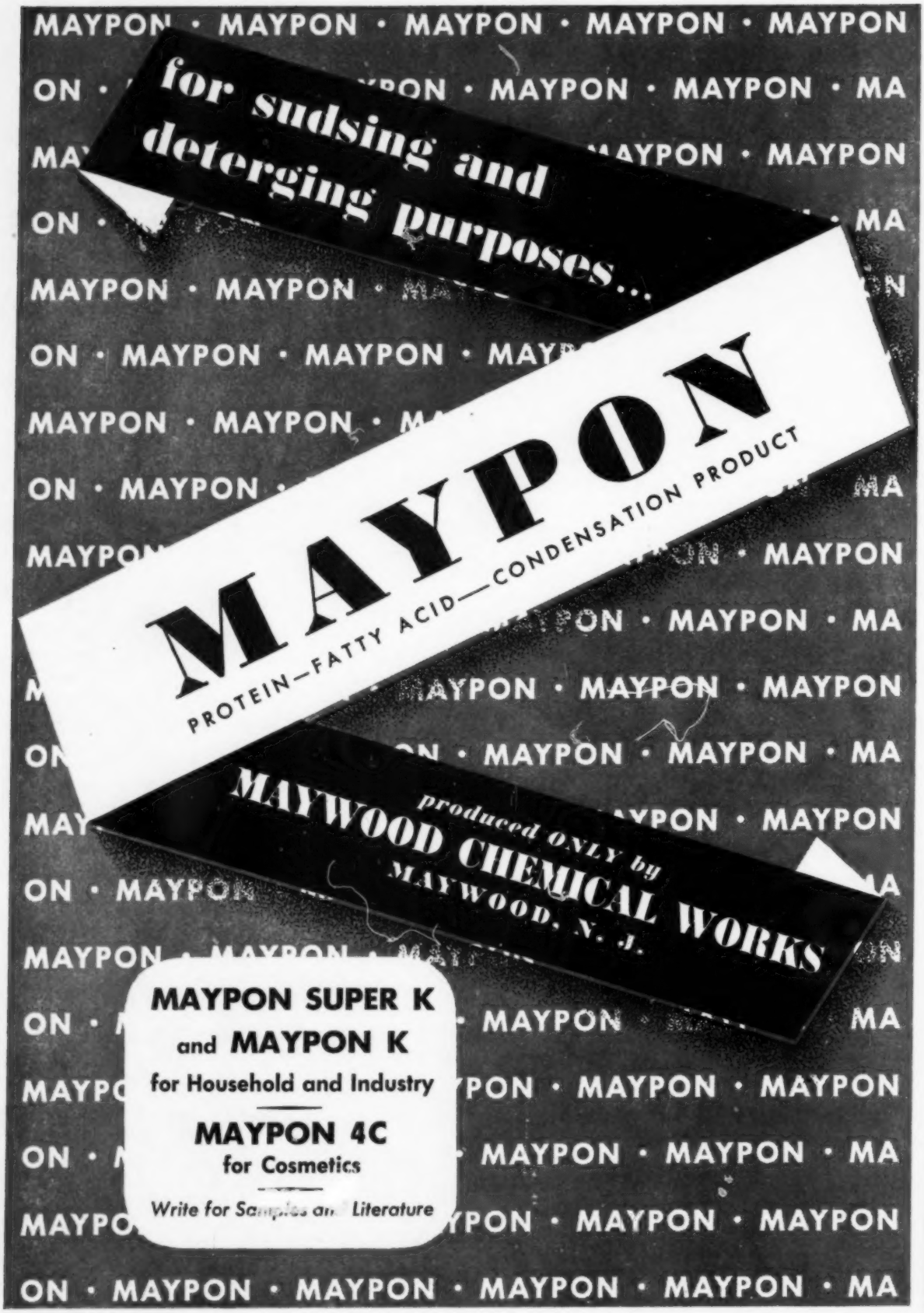
"G-11" Soap Brochure

A brochure entitled "Why Your School Should Use 'G-11' Soap . . ." has just been issued by Sindar Corp., New York. The illustrated brochure gives pertinent information on skin cleanliness and the control of such common school age troubles as skin blemishes.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for Cosmetics
Write for Samples and Literature

New C-P-P Unit

Election of William L. Sims II as president of Colgate-Palmolive International, a newly-formed corporation, was announced Jan. 8, by E. H. Little, president of Colgate-Palmolive-Peet Co., Jersey City, N. J. Mr. Sims has also been elected to the executive committee of Colgate-Palmolive-Peet Co. and will continue as executive vice-president in charge of its foreign business.

WILLIAM L. SIMS, II

R. A. Hart, J. C. Rebaza, M. B. Morton, W. B. B. Fergusson, E. A. Spicka, G. A. Glossop and H. F. Blum have been elected vice-presidents of Colgate-Palmolive International.

The new company will aid in coordinating Colgate's foreign operations, which are carried on through 25 subsidiaries, four branches and an export department. Employees outside the United States number about 9,900. Foreign sales of more than $122,000,000 were reported by Colgate for 1951. Sales for 1952 have not yet been announced.

CSC Has Methylglucamine

N-Methylglucamine, a polyhydroxyamine currently offered in experimental quantities, is the subject of a technical data sheet issued recently by Commercial Solvents Corp., New York. Physical and chemical properties are described and various industrial uses suggested. According to the bulletin surface active agents have been prepared from N-methylglucamine in the laboratories of CSC and marketed under the trade name "Glucaterge." Nonionic and anionic detergents can be prepared from N-methylglucamine by reaction with fatty acids. The resultant products are said to impart high viscosity to solutions, and to be good foam builders, detergents, and emulsifiers.

Joint Methanol Plant

Heyden Chemical Corp., New York, and Monsanto Chemical Corp., St. Louis, have entered into an agreement to build a methanol plant adjoining Monsanto's new acetylene facilities in Texas City, according to a recent announcement by Simon Askin, president of Heyden, and Joseph R. Mares, general manager of Monsanto's Texas operations.

The methanol plant will use by-product gas from the acetylene operation. Heyden and Monsanto will share equally in the cost of construction and in the output of the plant which is expected to have an approximate capacity of 25 million gallons per year. Commercial production is scheduled to begin in January 1955.

Methanol is used as a base for formaldehyde. In addition to this major use, it is being used in increasingly large volume in the production of detergents, waxes and resins, polishing and cleansing agents, paint removers, and other products.

Mr. Askin stated that the 60 acre plot of land on the Houston Ship Channel acquired by Heyden in 1951 was being held available for use in future expansion.

The famous Solvay trade-mark is changed for the first time in seventy years. The old mark has been simplified and modernized and the new design as shown here adopted for all labels, packages, etc. as of 1953.

SOLVAY

McCord Joins Davies-Young

Guy M. McCord recently joined Davies-Young Soap Company, Dayton, O., as plant superintendent. Previously, for a period of approximately 18 years he was plant superintendent of the Memphis, Tenn., plant of J. R. Watkins Co., Winona, Minn.

G. M. McCORD

Peroxide as Fat Bleach

Bleaching of fats and oils of animal and vegetable origin with hydrogen peroxide is described in a bulletin issued recently by E. I. du Pont de Nemours & Co., Electrochemicals Department, Wilmington, Del. Data on the amount of "Albone" peroxide required for the bleaching process, and on the procedure to be followed, are supplied.

P&G Moves Evans

W. R. Evans, formerly manager of the Atlanta sales district for Procter & Gamble Co., Cincinnati, has been transferred to Jacksonville, Fla., to become manager of the new district being organized there, it was announced recently. In Atlanta he will be succeeded by J. R. Marquess, formerly a unit manager in the P&G sales district in Baltimore.

Correction

The new midget size aerosol can which was pictured on page 55 of the December issue of *Soap & Sanitary Chemicals* is made by Continental Can Co., New York. We are sorry for the error.

ACTAMER,* Monsanto's new, nonirritating bacteriostat offers 4 advantages to increase sales

● **Actamer is effective, reduces resident skin bacteria over 97.5%.** Controlled hand-washing tests using Actamer-containing soaps showed a reduction of resident skin bacteria by more than 97.5%. Secret of Actamer's effectiveness . . . the ability to be retained on skin in minute amounts.

● **Actamer has exceptionally low toxicity for warm-blooded animals,** thus suggesting research studies in veterinary medicine. Actamer may likewise find application in such widely diversified products as industrial preservatives, diaper rinses, laundry detergents, medicated facial tissues, sanitary napkins and bath powders.

● **Actamer is colorless, tasteless** and as odorless as modern production methods can make it. Result: wide esthetic acceptability.

● **Actamer is economical.** Write for a quotation. You'll be pleasantly surprised at the price.

For technical bulletin describing Actamer, or a sample, write to MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, 800 North Twelfth Blvd., St. Louis 1, Missouri.

*Trade-mark

MONSANTO
CHEMICALS—PLASTICS

SERVING INDUSTRY . . . WHICH SERVES MANKIND

Start Soap Plant in India

Bharat Starch & Chemicals, Ltd., Jamna Nagar, Northern India, recently announced that they have started production of high grade washing and household soaps in their new modern and automatic soap factory. Manufacture of toilet soaps is scheduled to begin in the near future.

Brennan Joins Peggy Sage

Appointment of John B. Brennan as sales manager was announced recently by Peggy Sage, Inc., New York. Mr. Brennan has served in the past as general sales manager for Bourjois and Barbara Gould, and was recently associated with Joseph Reiss Advertising Agency and Helen Neushaefer, Inc., in an executive capacity.

At the same time Peggy Sage announced the appointment of Miss Ruth A. Bobbitt to the position of promotion director.

Hall Joins Mathieson

Dr. Marvin J. Hall, formerly associate director of research and development for Lever Brothers Co., New York, has joined the research and development department of Mathieson Development Co., Division of Mathieson Chemical Co., Baltmore, it was announced recently. Dr. Hall was director of research for Kraft Foods Co., Chicago, from 1946 to 1949, and prior to that he served as assistant to the director of research for Bauer & Black, Chicago.

Stone in Lever Post

Timothy J. Stone has been named assistant brand advertising manager for "Surf" and "Swan", it was announced recently by J. Harvey Howells, advertising manager of the Lever Division, Lever Brothers Co., New York. Mr. Stone comes to Lever from John Mather Lupton Co., and was previously associated with Vick Chemical Co.

Issue Methanol Booklet

Commercial Solvents Corp., New York, recently published a 30-page brochure on synthetic methanol. Specifications, chemical and physical properties, are listed. The uses of methanol as a cleaner, as an ingredient in preparations for dry-cleaning leather goods, in glass and in flushing fluids in the automotive industry, and as an intermediate in the manufacture of weed killers and insect repellents are mentioned among other industrial applications. Information on toxicology and health hazards, on shipping, handling and storage, and on specification test methods are included. A number of graphs and charts supply data important to the industrial consumer of methanol.

Chrysler Names P&G Head

Neil H. McElroy, president of Procter & Gamble Co., Cincinnati, has been elected to the board of Chrysler Corp., it was announced recently. He is a former president of the Association of American Soap & Glycerine Producers, Inc.

Introduces Fats, Oils Bill

A bill providing aid in stabilizing agriculture prices by providing an equalizing fee on imported fats and oils, an offset on exports of fats and oils, and for other purposes, has recently been introduced by Representative Martin of Iowa and referred to the U. S. House of Representatives Ways and Means Committee. The bill would amend that part of subchapter B of chapter 29 of the Internal Revenue Code relating to import taxes.

Dr. Cairns in Govt. Post

Robert W. Cairns, assistant director of research for Hercules Powder Co., Wilmington, Del., has been named vice-chairman of the research and development board, a staff agency of the Secretary of Defense, it was announced recently. Dr. Cairns will be on loan to the government for one year, serving without compensation. He has been assistant director of Hercules research department since 1945. In his new post Dr. Cairns will devote his full time to problems of national defense, with which he has been concerned on a part-time basis since the beginning of World War II. While working with the national defense re-

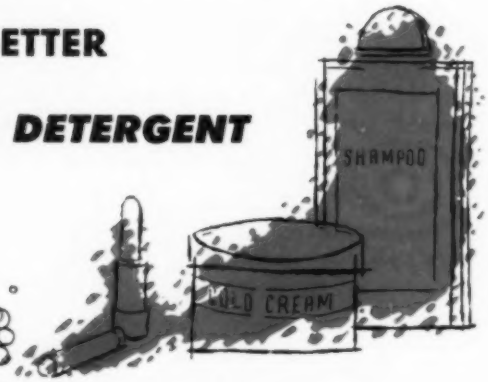
A tour of inspection of the firm's plant at Clifton, N. J., was one of the highlights of the recent annual sales meeting of Fritzsche Brothers Co., New York.

Photo below was taken during one of the luncheons at the Hotel New Yorker, during the sales conference.

From FIRE FIGHTING to FACE FIXING

A NEW AND BETTER

NON-IONIC DETERGENT



ONYX-OL 336

Wherever foaming, wetting, thickening, dispersing, emulsifying or cleaning is an important consideration, make **ONYX-OL** your first consideration.

Versatile enough for such diverse applications as industrial cleaners, buffing compounds, cosmetics, fire fighting solutions and household detergents, **ONYX-OL** matches that versatility with the scope of its properties.

ONYX-OL shows high viscosity in aqueous solutions without additives, foams magnificently with highly stable small bubbles, emulsifies most common oils, wets and disperses, cleans hard and soft surfaces and rinses and drains readily (particularly on dishes and glassware).

Send today for test samples and complete data for any of the following uses:

- INDUSTRIAL CLEANERS
- SHAMPOOS
- FOAMING FIRE-FIGHTING SOLUTIONS
- WETTABLE SULPHUR
- BUFFING AND POLISHING COMPOUNDS
- COSMETICS AND BUBBLE BATHS
- POLISHES
- ORE FLOTATION SOLUTIONS
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In Canada: ONYX Oil & Chemical Co., Ltd., Montreal, Toronto, St. Johns, Que. For Export: ONYX International, Jersey City 2, N. J.
West Coast Representative: E. S. Browning Co., San Francisco, Los Angeles

search committee during 1944 and 1945 he was cited by the U. S. War and Navy Departments for his work on propellents and explosives.

Brodie Tells P&G Policies

A levelling off in the growth of synthetic detergent sales in recent months was reported by R. K. Brodie, vice-president, Procter & Gamble Co., Cincinnati, when speaking before a recent meeting of the Cleveland Society of Security Analysts. About one-third of the cleansing materials currently used in the American home are synthetic detergents according to Mr. Brodie.

A bright year for the soap and detergents industry is foreseen by him, owing to increases in the population and in the standard of living.

He said that P&G believes it is entitled to a reasonable profit before or after taxes and sees no reason to change that viewpoint. He reported that over a thirty-year period company profits before taxes have averaged 11.7 per cent on total sales and after taxes 8.4 per cent of total sales.

Mr. Brodie also stated his company feels it should operate only in fields in which it has had experience, but should always be willing to expand in related fields. Procter & Gamble is mainly interested in products capable of attaining large volume at relatively small unit profit, according to the speaker.

The value of research has long been recognized by P&G, Mr. Brodie said. Currently a budget equivalent to around one and one half per cent of sales is devoted to research. Approximately 1,500 employees are now directly engaged in research work, one-third of them trained technologists.

For longer range planning, Mr. Brodie said, the company seeks to determine the expansion which will be needed for changes in the actual character of the industry, for example the vast development since World War II in the field of synthetic detergents.

New "Swan" toilet soap, announced early this month by Lever Brothers Co., New York, is said to be the only white, floating, fragrant toilet soap. It will retail for five cents. The product will make its initial market appearance simultaneously in New England, upper New York and the Philadelphia area. It is said to be produced under a new manufacturing process.

Installs New Officers

The Chicago Perfumery, Soap and Extract Association installed its new officers for 1953 at its regular monthly luncheon meeting held at the Conrad Hilton Hotel, January 13. The new slate includes: J. C. Browning, Demert & Dougherty, president; W. D. Ackley, van Ameringen-Haebler, vice-president; E. F. La Sarre, St. Clair Specialty Manufacturing Co., treasurer; and Arthur H. Culver, Packing Materials Corp., secretary.

Newly elected officers of the Chicago Perfumery, Soap and Extract Assn. are, l. to r.: W. D. Ackley, van Ameringen-Haebler, Inc., vice-president; J. C. Browning, Demert & Dougherty, Inc., president; E. F. La Sarre, St. Clair Specialty Mfg. Co., treasurer; A. H. Culver, Packing Materials Corp., secretary.

Soap Meeting

(*From Page* 33)

A reception from 6:30 to 7:30 p.m. in the East Foyer precedes the banquet in the grand ballroom at 7:30. In addition to an address by Gen. Carlos P. Romulo, Ambassador of the Philippines and his country's representative at the United Nations, there will be entertainment provided by the four major radio networks.

Bids and AWARDS

Navy Soap Bids

Low bids on 1,068,000 pounds of milled toilet soap in a recent opening for miscellaneous supplies by Navy Purchasing Office, New York, were submitted by the following: Armour & Co., Chicago, 1.79 cents, destination a., Bayonne; Iowa Soap Co., Burlington, Iowa, 2.3 cents, destination b., Oakland.

VA Shaving Cream Award

The award on 3,936 dozen two-ounce tubes of shaving cream, included in a recent opening for miscellaneous supplies by the Veterans Administration, Washington, went to Comfort Manufacturing Co., Chicago, with the following bids: item 1, 95 cents; item 2, 98 cents; item 3, 88 cents.

FSS Soap Bid

A recent opening for miscellaneous supplies by Federal Supply Service, Washington, D. C., included 84,500 pounds of soap. Lowest bid of 9.15 cents was submitted by Stahl Soap Corp., Brooklyn, N. Y.

Post Office Soap Award

Stahl Soap Corp., Brooklyn, won the award on 50,000 pounds of floating toilet soap in a recent opening for miscellaneous supplies by the Post Office Department, Washington, with a bid of 9.63 cents per pound.

FSS Aerosol Bid

In a recent opening for miscellaneous supplies by Federal Supply Service, New York, on 8,000 DDT aerosol units, A. M. R. Chemical Co., Brooklyn, submitted the low bid of 55 cents.

Naphthalene Bids

In a recent opening for miscellaneous supplies by New York Navy Purchasing Office, the following low bids were submitted on 15,000 pounds of naphthalene flake by Standard Naphthalene Products, South Kearny, N. J., item a, 16.62 cents; b, 16.67 cents; d., 18.36 cents; and by Naphthalene Products Co., Tarrant, Ala., item c, 17.41 cents.

Liquid Soap Bid

In a recent opening for miscellaneous supplies by Federal Supply Service, Washington, D. C., Crystal Soap & Chemical Co., Philadelphia, submitted a low bid of 59 cents on 1,540 gallons of soap.

Post Office Cleaner Award

A recent opening for miscellaneous supplies by Post Office Department, Washington, included cleaner for painted surfaces, item 1, 80,000 pounds in 25-pound drums, item 2, 50,000 pounds in 50-pound drums. The award was won by Octagon Process, Staten Island, N. Y., with bids of 7.2 cents per pound on item 1, and 7.1 cents per pound on item 2.

Babbitt Low Bid

In a recent opening for miscellaneous supplies by Federal Supply Service, Dallas, the lowest bid of 6 6/7 cents on 14,160 containers of scouring powder was submitted by B. T. Babbitt Co., New York.

Low Bid on Spray

A recent opening for miscellaneous supplies by Navy Purchasing Office, New York, included 50,050 gallons of airplane spray insecticide. Lowest bidder was Durham Chemical Co., Los Angeles, with 31.8 cents.

FSS Toilet Soap Bid

A recent opening for miscellaneous supplies by Federal Supply Service, New York included 144 cases, each of 1000 half-ounce cakes white toilet soap. Lowest bidder was Procter & Gamble Co., Cincinnati, with a bid of $9.56.

Metal Polish Bid

Metal polish in powder form was included in a recent opening for miscellaneous supplies by Federal Supply Service, New York, for destinations a, Boston; b, Newark; c, Washington, D. C.; d, East Point; e, Cleveland; f, Arjo; g, Kansas City; h, Fort Worth; i, Denver; j, Los Angeles; k, San Francisco; l, Seattle; m, Gallup. Lowest bid of 11.9 cents for all destinations was submitted by Pal Products Manufacturing Co., Brooklyn, N. Y.

FSS Soap Awards

In recent openings for miscellaneous supplies by Federal Supply Service, Washington, D. C., the award on 84,150 pounds of toilet soap went to Stahl Soap Corp., Brooklyn, N. Y. with 9.15 cents per pound; the award on 1,540 gallons of liquid soap was won by Crystal Soap & Chemical Co., Phila., with 59 cents per gallon.

Navy Disinfectant Bid

A recent opening for miscellaneous supplies by Navy Purchasing Office, New York, included 17,832 gallons of liquid disinfectant for a, Bayonne; b, Norfolk; c, Cherry Point; d, San Diego; e, San Pedro; f, Oakland. Low bids were submitted by the following: Rohm & Haas Co., Philadelphia, destination a, $2.70; Onyx Oil & Chemical Co., Jersey City, destination b, $2.878 and c, $3.076; Continental Chemical Co., North Sacramento, Calif., destinations d & e, $2.24 and f, $2.18.

Disinfectant Bids

Low bids on 1,116 gallons insecticide for a, Norfolk and b, Oakland in a recent opening for miscellaneous supplies by New York Navy Purchasing Office were submitted as follows: Food Machinery & Chemical Corp., Niagara Chemical Division, Middleport, N. Y., destination a, $7.516; b, $8.041; California Spray Chemical Corp., Richmond, Calif., all $7.46.

Controllers Elect Penney

Norman H. Penney, comptroller, Lever Brothers, Ltd., Toronto, and James E. McMahon, assistant treasurer, Lentheric, Inc., Long Island City, N. Y., have been elected to membership in the Controllers Institute, New York, it was announced recently.

Oil Citronella Ceylon II Imitation 3654

Especially effective for perfuming household and floating soaps, insecticides, fly sprays and similar products.

& co., inc.

601 West 26th Street • New York 1, N. Y.

NEW Trade Marks

THE following trade marks were published in recent issues of the *Official Gazette* of the U. S. Patent Office in compliance with section 12(a) of the Trade Mark Act of 1946. Notice of opposition under section 13 may be filed within 30 days of publication in the *Gazette*. See rules 20.1 to 20.5. As provided by section 31 of the Act, a fee of $25 must accompany notice of opposition.

Marbe-Lake — This for cleaner for tile and stone floors. Filed March 27, 1952 by Finger Lakes Chemical Co., Etna, N. Y. Claims use since August 21, 1951.

Be-Gone — This for shampoos. Filed April 16, 1952 by Gold Medal Hair Products, Inc., Brooklyn, N. Y. Claims use since February 21, 1950.

Balance — This for detergent for household use. Filed April 26, 1952 by Max A. Gurvich, Seattle, Wash. Claims use since March 20, 1952.

Sun—This for detergents and soaps. Filed April 26, 1952 by Los Angeles Soap Co., Los Angeles, Calif. Claims use since June 13, 1951.

Romp — This for sudsing detergent for glass and dishes. Filed April 30, 1952 by Soap Specialties, Inc. Philadelphia. Claims use since July 16, 1951.

Basco—This for hand cleaner. Filed May 1, 1952 by Bacom Lay, Nashville, Ark. Claims use since January 1, 1952.

Gold-Bond—This for automobile polish. Filed May 4, 1949, by Gold Bond Manufacturing Co., Millersport, O. Claims use since November 20, 1936.

Plyon—This for polishing and cleaning material. Filed August 16, 1950, by Goodenow-Morley Co., Oklahoma City. Claims use Since May 1, 1950.

Speed Up—This for auto polish and cleaner wax. Filed November 24, 1950 by American Stores Co., Philadelphia. Claims use since July 3, 1950.

Vamoos—This for air deodorant used in vaporous form. Filed January 19, 1949 by Vamoos Products, Inc., Chicago. Claims use since October 4, 1948.

Exodr—This for household deodorant powder. Filed July 26, 1950, by Bickmore Co., Old Town, Me. Claims use since May 17, 1946.

Chlorets—This for disinfectant and bleach tablets including chlorine. Filed April 25, 1951, by Gliss'n Products Co., Chicago. Claims use since November 1, 1950.

Creo-Terminol—This for chemical mixture for prevention of termites. Filed September 6, 1951, by Benjamin F. Burton, Jr., Birmingham, Ala. Claims use since May 1, 1951.

Myritol—This for deodorizing fluid for use in drip machines. Filed February 18, 1952, by West Disinfecting Co., Long Island City, N. Y. Claims use since January 1, 1906.

Kil-Moth—This for liquid insecticide. Filed February 18, 1952, by West Disinfecting Co., Long Island City, N. Y. Claims use since March 1, 1922.

West Kleenoda—This for deodorant cakes and fluid for use in drip machines. Filed February 18, 1952, by West Disinfecting Co., Long Island City, N. Y. Claims use since March 1, 1928.

Hy-Phos—This for water-treating composition adapted for use as water softener, wetting agent, sequestering agent and in detergents. Filed April 29, 1952, by American Dyewood Co., New York. Claims use since March 19, 1952.

KoCal—This for a brightening and whitening agent for use in laundering clothes. Filed May 14, 1952, by Milner Products Co., Jackson, Miss. Claims use since February 1, 1952.

Baxin — This for bactericide. Filed June 18, 1949, by Amm-I-Dent, Inc., Jersey City, N. J. Claims use since June 8, 1949.

Arlac—This for laundry washing compound and detergent builder. Filed November 5, 1949, by Wyandotte Chemicals Corp., Wyandotte, Mich. Claims use since June 25, 1948.

Hydrox—This for cleaning powder having disinfectant properties. Filed May 4, 1950, by Alfred E. Harriman, Los Angeles, Calif. Claims use since February 1, 1950.

Merrie-Magic—This for shampoo. Filed January 22, 1951, by Maybert Corp., New York. Claims use since December 28, 1950.

Pen-Glo — This for detergent particularly adapted for dishwashing. Filed January 23, 1951, by Pennsylvania Salt Manufacturing Co., Philadelphia. Claims use since December 12, 1950.

Ralph's Spot—This for stick of chemical substance for removing spots. Filed October 9, 1951, by Ralph H. Goldman, New York. Claims use since February 14, 1951.

Sulfur-8—This for hair shampoo. Filed November 30, 1951, by Sulful-8 Chemical Co., Brooklyn, N. Y. Claims use since January 10, 1948.

Dial—This for shampoo. Filed December 17, 1951, by Armour and Co., Chicago. Claims use since September 28, 1950.

Delicate—This for liquid hand soap. Filed February 18, 1952, by West Disinfecting Co., Long Island City, N. Y. Claims use since January 1, 1932.

Coltex—This for medium titre soap powder sold to the dry cleaning trade for wet cleaning. Filed February 20, 1952, by E. F. Drew & Co., New York. Claims use since January 9, 1952.

CPC-25—This for pan cleaner. Filed March 20, 1952, by C. J. Patterson Co., Kansas City, Mo. Claims use since February 1, 1952.

Glide Rite—This for dance floor wax. Filed January 21, 1950, by J. C. Paul & Co., Chicago. Claims use since January 1, 1935.

Husky—This for cleaning pads for pots, pans, dishes, etc. Filed June 14, 1952, by Cleanser Products, Inc., Chicago. Claims use since May 5, 1952.

Sphinx—This for room deodorants. Filed March 20, 1949, by Flossy Dental Corp., Chicago. Claims use since February 19, 1949.

FMC — This for insecticides, fungicides, and parasiticides. Filed October 23, 1951, by Food Machinery and Chemical Corp., San Jose, Calif. Claims use since May 17, 1948.

Advacide—This for fungicides and mildew-proofing agents. Filed January 24, 1952, by Advance Solvents & Chemical Corp., New York. Claims use since December 18, 1951.

Calgon—This for water softening and water conditioning chemicals for industrial, laundry, wet cleaning and home use. Filed March 28, 1952, by Calgon, Inc., Pittsburgh, Pa. Claims use since December 11, 1943.

Roach Filmz—This for roach exterminator. Filed May 10, 1952, by Earl Grissmer Co., Indianapolis. Claims use since April 4, 1952.

Octons—This for insecticides for household use. Filed May 15, 1952, by Koppers Co., Pittsburgh. Claims use since April 29, 1952.

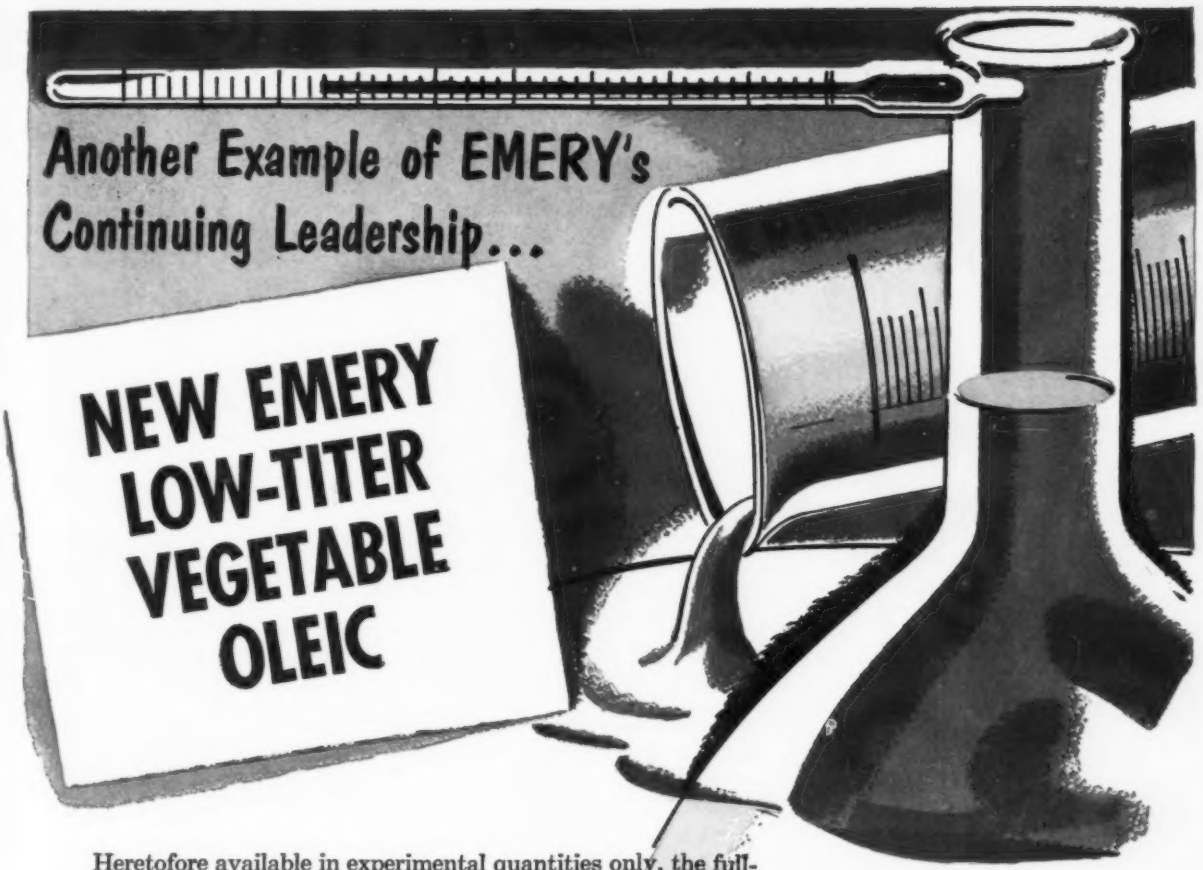
Chlorthion—This for insecticidal compositions. Filed May 21, 1952, by Robert V. Geary, Blue Point, N. Y. Claims use since May 13, 1952.

V-C Nix—This for synthetic detergent in powder form. Filed September 5, 1951, by Virginia-Carolina Chemical Corp., Richmond, Va. Claims use since June 7, 1951.

V-C Speed—This for synthetic detergent in powder form. Filed September 5, 1951, by Virginia-Carolina Chemical Corp., Richmond, Va. Claims use since June 7, 1951.

V-C Quick—This for synthetic detergent in powder form. Filed September 5, 1951, by Virginia-Carolina Chemical Corp., Richmond, Va. Claims use since June 7, 1951.

Butcher's—This for paste and liquid waxes, and self-polishing wax for floors and other surfaces. Filed May 24, 1950, by Butcher Polish Co., Boston. Claims use since May 24, 1883.



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Heretofore available in experimental quantities only, the full-scale production of Emersol 241 Vegetable Elaine opens many new applications where low titer is essential. Specifications of this all-vegetable oleic acid are as follows:

Iodine Value	85-95
Titer, °C	5-10
Acid Value	191-197
Saponification Value	192-198
Color (Lovibond 5¼" cell)	15Y/3R Max.

This new product, a low-titer counterpart of Emersol 240 Vegetable Elaine, is the tenth oleic acid in the Emery line.

EMERSOL VEGETABLE ELAINES are superior replacements for olive oil foots in soaps and shampoos and so-called "castile" soaps. Check Emersols 240 and 241 in your formulation today!

A complete selection of high-quality, high-stability Emersol Elaines assures you of the best oleic acid for your specific application.

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Emersol 212 Elaine
Emersol 220 White Elaine
Emersol 221 Low-Titer White Elaine
Emersol 233 LL Elaine
Emersol 240 Vegetable Elaine
Emersol 241 Vegetable Elaine

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Emersol 200 Saponified Red Oil
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*Title*_____

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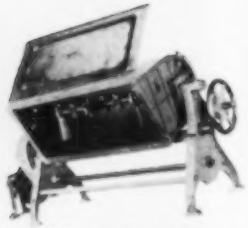
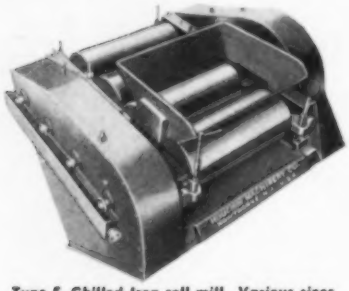
HOUCHIN SOAP MAKING MACHINES



Tilting Amalgamators; other types available.

include every machine required for modern soap manufacture, available individually or in complete production ranges.

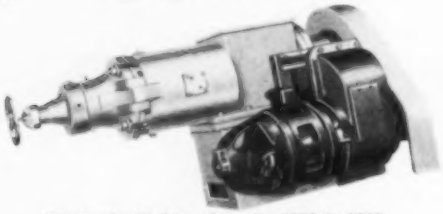


Type F. Chilled Iron roll mill. Various sizes from laboratory type to four 18" x 40" water cooled rolls.

One of our newer machines is the

"SAFETY" AIR PRESS

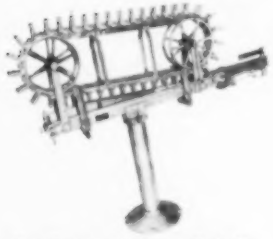
(Patented in USA and other countries) for which we are the manufacturing sales licensees.



14" Jumbo Plodder. Capacity 4000 to 6000 per hour. Also made in 12" — 10" — 8" 4" and 2½" sizes.

SAFER because the air ram cannot move until the operator presses down both right and left hand air controls *simultaneously*.

FASTER because production speed is limited only by the skill of the operator in loading blanks and removing finished cakes.



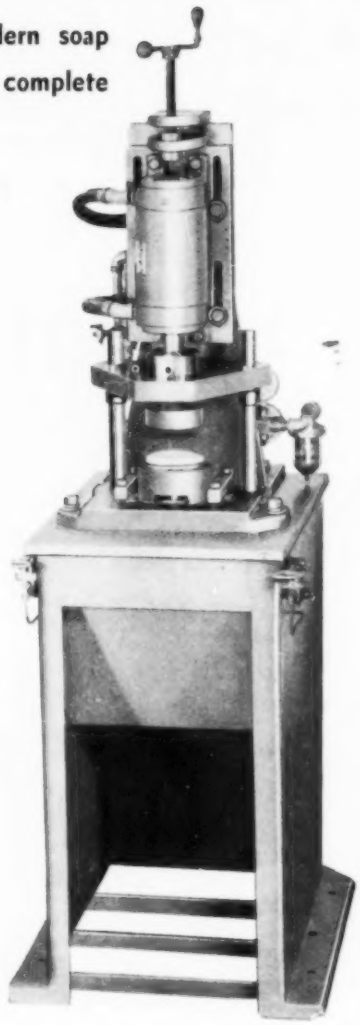
Van Buren motorless, adjustable, continuous cutter. Scrapless. Other types available.

EASIER TO OPERATE because there are no foot controls, and the operator remains seated.

Van Buren high speed soap wrappers for all sizes and types of soap.

OTHER FEATURES OF THIS STURDY MACHINE:

1. Single or multiple power strokes.
2. Any desired period of "dwell" under fingertip control by operator.
3. Presses soap cakes and other plastic substances into perfect shapes, with well defined imprints.
4. Tough or tender textured soaps are uniformly pressed, in either box or pin dies, and the desired ranges of density are controlled by a simple hand adjustment quickly made by the operator.



5. Surface pressures up to 2500 lbs. are effected on the "Model A" machine illustrated.
6. Automatic air cylinder lubrication, air cleaner, and other efficiency features assure easy maintenance and long service.
7. May be connected with your present compressed air lines, or we can provide a fully automatic electric compressor set.

This "Safety" Air Press is also successfully used with "cutting and stamping" dies for other than plastic substances.

Write for specifications and quotation.

HOUCHIN MACHINERY CO., INC.

Sixth & Van Winkle Avenues, Hawthorne, New Jersey, U.S.A.

Manufacturers of soap making machinery since 1840

Gluconic Acid in Cleansers

IN many chemical operations solutions of caustic soda have to be prepared in untreated water. Since such water often contains calcium and magnesium salts, precipitates appear in the solutions. Lately it has been discovered that sodium gluconate prevents formation of such insoluble precipitates in hard water solutions of caustic soda. This property remains active over a wide range of concentrations of caustic soda. The quantity of sodium gluconate required obviously depends upon the degree of water hardness. Generally a proportion of five to 10 per cent gluconate (by weight of caustic soda), does the job.

Such a use of sodium gluconate makes it possible to avoid deposits on various machines, such as bottle washing equipment in the dairy and food industries.

Sodium gluconate in hard water treatment finds application in the washing of textiles, so as to avoid calcium deposits which have to be removed by an additional procedure. Two methods for industrial production of gluconic acid are mentioned: oxidation through fermentation of glucose or other various carbohydrates, and oxidation by chemical means, mostly electrochemical. Fermentation has apparently so far been the method of choice. Two varieties of the fermentation process are described, one resulting in the acid, the other directly yielding the sodium salt. *Aspergllus niger* is the microorganism used in both. Properties of the acid are described, absence of toxicity and weakness of corrosive action on metals being the most important. The latter is numerically substantiated by results of comparative experiments.

Gluconic acid can play an important role in the formulation of cleansing agents. It is extensively used in cleaning of dairy containers and machinery to eliminate tartar and mineral deposits. Absence of toxicity and slightness of corrosive action makes it ideal for this purpose. Until the past few years alkali cleansing agents were used which did not permit total removal of proteolytic bacteria, and which left a microscopic film on the metal surfaces which could serve as a nutrient medium for microorganisms. These difficulties are avoided by use of gluconic acid either in solution or in addition to the steam used in cleaning operations.

Vessels cleaned by steam acidified with gluconic acid are entirely free of odor. American patent 2,424,-049 describes this application while covering the combined use of gluconic acid with a surface active wetting agent.

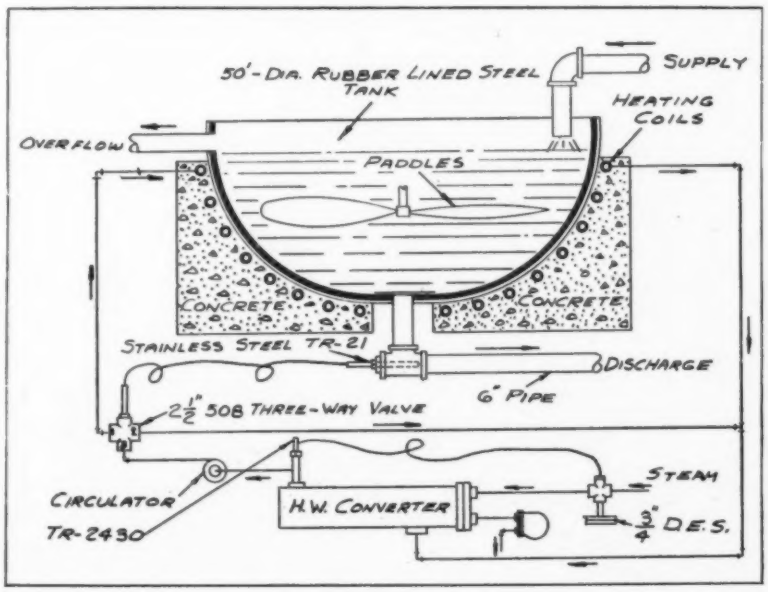
Use of gluconic acid formulations for the cleaning of aluminum kitchen ware is the subject of American patent 2,362,284. Gluconic acid

Controlled Radiant Heat for Vegetable Oil Treatment

THE use of controlled radiant heat for vegetable oil treatment in soap making is illustrated in the sketch below. The sketch, submitted by Leo Walter, consulting engineer of Cheltenham, England, shows an interesting example of a large boiling tank heated by hot water in coils embedded in concrete. In this installation cottonseed oil is treated with sodium-hydroxide to produce an emulsion for use in soap making, probably as a substitute for coconut oil. The process is continuous, 24 hours a day, and a very even temperature must be maintained.

Instead of using steam heat in a jacketed kettle, the rubber-lined steel tank, below, is set in a concrete base, in which a hot water heating coil is embedded just as is done for radiant heating of buildings. A 2½ inch, self-actuated temperature regulator, set at 105°F. and equipped with balanced three-way valve, by-passes a varying portion of the water around the kettle and back to the converter shown. The latter holds the water to a delivered temperature of 225°F. The steam pressure is 135 psi.

It is obvious that this combination of recirculating control with constant temperature of the heating medium and continuous operation with steady load will produce ideal temperature control.



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TO BUILD YOUR PROFITS

QUALITY

Stepan Liquid Detergents and Liquid Detergent Bases can assure you of a product unequaled for flash foam, detergency and foam stability.

PRICE

Attractive pricing . . . ease of compounding and perfuming . . . unusually high percentage of active, all are factors in providing an excellent margin for you.

LABORATORY ASSISTANCE

Our new laboratory facilities are at your service to help you in developing formulations for your particular product.

The Chemicals of Tomorrow . . . Today

The complete new line of Stepan Liquid Detergents and Liquid Detergent Bases provides an exceptional opportunity for bottlers and formulators to cash in on the growing demand for liquid dishwashing detergents and liquid cleaning detergents of all types.

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THE STEPAN CHEMICAL CO.

3250 So. Kedzie Avenue
Chicago 23, Illinois

in the cleansing and maintenance of metallic brewery equipment is discussed.

In the textile industry its action as sequestering agent is of utmost importance.

Gluconic acid and its salts, preparation, properties, uses, by H. Beduneau, *Revue des Produits Chimiques*, September 30, 1952, page 4.

—— ♦ ——

Issue Fatty Acids Data

A 20-page illustrated booklet covering technology and usage of fatty acids has been published recently by the fatty acid division of the Association of American Soap and Gycerine Producers, Inc., New York, and is available from the association free of charge. Fat splitting processes, separation of individual acids, such as stearic and oleic, and methods used in purification and chemical modification of natural acids are described. A review of major uses for different fatty acids is supplemented with a chart showing more than sixty specific applications. The bulletin is being offered as a joint project of twenty-two producer members.

—— ♦ ——

Fatty Acid Slide Rule

Wilson-Martin Division of Wilson & Co., Philadelphia, recently issued a fatty acids catalog in the form of a circular slide rule. It supplies chemical specifications and approximate composition of various types of fatty acids, and carries a color conversion chart.

—— ♦ ——

Gives Ethanolamine Data

Ethanolamines, mono-, di-, and tri-, are the subject of a technical bulletin issued recently by Carbide and Carbon Chemicals Co,, Division of Union Carbide and Carbon Corp., New York. Chemical, physical, and physiological properties; shipping data and industrial uses are shown. Ethanolamine soaps are used as emulsifiers, detergents, and surface-tension depressants. They are said to be practically neutral, soluble in water and hydrocarbon solvents. Their field of application includes oil and wax polishes, stain removers, detergents, and shampoos.

Determining Free Alkali in Soap

A NEW method of determination of free alkali in soaps containing neutral glycerides is based on the fact that cold soap is insoluble by means of a 14 percent sodium chloride solution. Hydrolysis of soap is defined and found to be trifling under the given conditions, influencing the final value of caustic alkali only in the second decimal.

The process for preparation of aqueous soap solution without free alkalies and fatty acids is described. Using this solution a series of tests are run to check the sensitivity of the new method.

Results obtained in the testing of trade soaps by the new method are compared with those obtained in parallel tests by the classic alcohol method. Values obtained by both methods are equivalent when the tested product does not contain neutral unsaponified elements or when they are present only in minute quantities. Perceptible discrepancies appear with the alcohol method, when the tested soap contains a considerable percentage of either caustic alkali or unsaponified neutral matter.

Testing of alkali absorption for the purpose of evaluation of unsaponified neutral elements is considered. Analytical interpretation of results is considered.

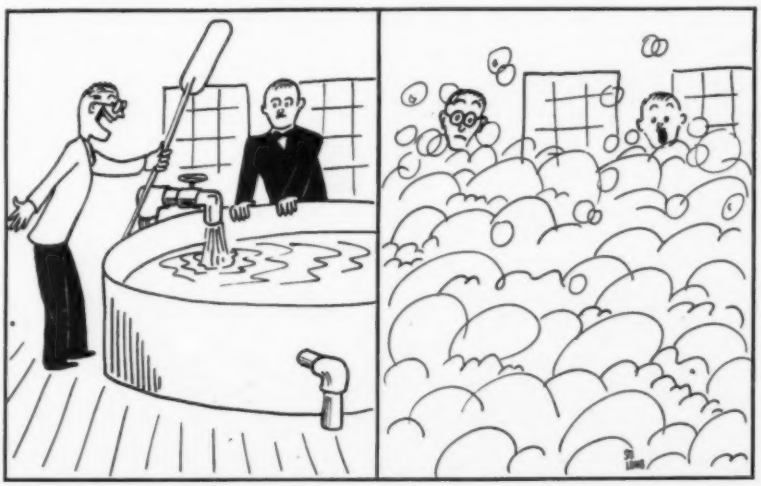
It is concluded that the method for determination of caustic alkali and free carbonates in cold aqueous saline solution proves itself more accurate in soda soaps containing neutral unsaponified matter than the classic alcohol method, provided that proper modifications are made and necessary precautions observed.

Since neutral unsaponified constituents are present in every commercial soap the method has general bearing on the testing of all potash and soda-potash products of recent manufacture.

The actual process takes one hour and a half. It can be adapted to serial testing in industrial laboratories, which must analyze the true characteristic properties of the finished product. The method has the advantage of simultaneously determining the true percentage of free alkali in soaps and the value of unsaponified matter (by absorption through saponification).

Contribution to the real evaluation of free alkalies in pure rosin soaps containing unsaponified neutral components, by A. Accinelli, *Oleagineux*, July 1952, p. 403.

On second thought . . .



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"Oh, Joe! Jo-o-o-e!!!"

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That's the way we want it to be, here at Claymont.

Because that's the way we make sure that your order for alloy steel gets careful, individualized supervision . . . painstaking attention to every processing detail right from the front office, through our laboratories, down to the men who roll your steel.

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CLAYMONT STEEL PRODUCTS

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THE COLORADO FUEL AND IRON CORPORATION

CF&I

Anti-trust Suit

(*From Page 39*)

and sale of those materials; and

(2) Restrict and control competition with each other and with all others engaged in the purchase and sale of those materials.

"To effectuate the objectives of the aforesaid combination and conspiracy:

"Defendants Procter, Lever and Colgate have attained, maintained, augmented, and exploited their dominance over all others and restricted and controlled competition with each other and with all others engaged in the production and sale of household-soap and household-synthetic detergents;

"(1) By establishing, maintaining, and dominating the defendant Association and causing it to assist them in the accomplishment of the objectives of the combination and conspiracy;

"(2) By achieving control (through merger or acquisition by one or another of said defendants) over production, distribution, and sales facilities of manufacturers of household soap;

"(3) By exchanging information concerning prices; terms and conditions of sale; advertising and promotional methods, claims, and expenditures; packaging; production processes; sales; costs; and raw materials;

"(4) By controlling and fixing prices at which their brands are sold by themselves and by retailers;

"(5) By controlling and regulating their use of advertising and promotional methods and claims;

"(6) By controlling and fixing terms and conditions of sale for their brands;

"(7) By controlling, manipulating and fixing amounts which they expend for promotions and advertising;

"(8) By sharing, by cross licenses to the exclusion of others, patents and patent rights controlling commercially superior spray-dried soap products, and processes and apparatus for making such products;

"(9) By sharing market-survey facilities;

"(10) By employing in the several market areas of the United States methods of couponing, sampling, special deals and other promotional and advertising devices which are designed systematically to utilize the advantages arising from multiple established brands, shared market-survey facilities, and sales organizations operating in every market area, with the purpose and effect of:

(a) Inducing retail sellers, particularly operators of self-service stores, to give defendants' brands predominant shares of the shelf space devoted to display of household soap and household synthetic detergents, and

(b) Obstructing the promotion and sale of existing and new brands of household soap and household synthetic detergents produced by other manufacturers;

"(11) By inducing principal producers of base materials for synthetic detergents to concentrate on the production of these materials for sale to Procter, Lever and Colgate, and to discontinue or curtail production of synthetic detergents;

"(12) By restricting and controlling competition among themselves and with others in the production and sale of glycerine by

(a) Curtailing the volume of glycerine production;

(b) Controlling and fixing prices at which, and the terms and conditions under which, glycerine is sold, and

(c) By exchanging information concerning glycerine prices, price policies, production, stocks, supplies, consumer demand, and imports from other countries into the United States . . ."

"B. Defendants Procter, Lever, and Colgate have attained, maintained, augmented, and exploited their dominance over all others engaged in the purchase and sale of principal materials used in the production of soap and synthetic detergents, and have restricted and controlled competition with each other and with all others engaged in the purchase and sale of said materials;

(1) By exchanging information concerning policies, practices and market positions for purchases of raw materials, which information related to prices offered, amounts to be purchased, prices paid and to be paid, stocks, supplies, and amounts purchased;

(2) By obtaining systematic discriminatory preferences over other purchasers of inedible tallow and grease, and of other raw materials used in the production of soap;

(3) By controlling and manipulating market-price reporting mechanisms for inedible tallow and grease;

(4) By encouraging others to buy and sell inedible tallow and grease at prices based on the market-prices reported by the mechanisms referred to in subparagraph 3 (above);

(5) By making purchases, commonly termed "confidential deals" requiring that sellers (including any participating brokers) conceal such transactions in order to avoid their affecting either the market-prices reported by the mechanisms referred to in subparagraph 3 (above) or the market positions of other buyers and sellers;

(6) By controlling, mainpulating and fixing prices at which they purchase inedible tallow and grease, and other raw materials used in the production of soap;

(7) By sometimes requiring sellers of inedible tallow and grease, and of other raw materials used in soap to sell to them direct without the intervention of brokers and at other times requiring sellers to sell to them through brokers whose commissions are paid by the sellers;

(8) By dominating brokers whose commissions are paid by sellers of inedible tallow and grease, and of other raw materials used in the production of soap;

(9) By acquiring from others exclusive patent rights controlling base materials and processes for the production of base materials, for synthetic detergents derived from vegetable and from animal fats and oils;

(10) By purchasing and agreeing to purchase substantially all of the available supplies of petroleum base materials used in the production of synthetic detergents;

(11) By inducing principal producers of base materials for synthetic detergents to concentrate on the production of base materials for sale to Procter, Lever and Colgate, and to discontinue or curtail production of synthetic detergents . . ."

"C. The defendant Association has assisted the other defendants in doing the things described in subparagraphs 34-A and 34-B of this complaint.

"Pursuant to the aforesaid combination and conspiracy to restrain and monopolize, and to achieve and maintain the monopolization charged in paragraph 32 of this complaint, the defendants have done those things which are described in paragraph 34 of this complaint.

Effects

"THE effects of the combination and conspiracy alleged in this complaint have been, among others:

"A. Housewives and other consumers of household-soap and household-synthetic detergents have been and are compelled to buy household-soap and household-synthetic-detergents at prices and under market conditions dictated by defendants Procter, Colgate and Lever;

"B. Other manufacturers of household-soap and household-synthetic-detergents have been excluded from the opportunity of competing freely with Procter, Colgate and Lever in the sale and distribution of said products;

"C. Companies other than Procter, Colgate and Lever have been and now are being prevented from marketing new brands of household-soap and household-synthetic detergents;

"D. Producers and sellers of inedible tallow and grease, and the butchers, processors and livestock producers from whom they obtain the fat and scrap from which inedible tallow and grease are made, have been and now are being deprived of the benefits of a free competitive market for the sale of inedible tallow and grease; and

"E. Grocers have been and now are being deprived of the benefits of a free competitive market in which to purchase household-soap and household-synthetic detergents.

Prayer

WHEREFORE, plaintiff prays:

"1. That the Court adjudge and decree that all the defendants have combined and conspired to restrain and monopolize interstate trade and commerce in the production and sale of household-soap and household-synthetic-detergents and in the purchase and sale of the principal materials used in soap and synthetic detergents in violation of Sections 1 and 2 of the Sherman Act.

"2. That the Court adjudge and decree that the defendants Procter, Colgate and Lever have monopolized interstate trade and commerce in the production and sale of household-soap and household-synthetic-detergents and in the purchase and sale of the principal materials used in soap and synthetic detergents in violation of Section 2 of the Sherman Act.

"3. That each of the defendants and each of its officers, directors,

This newest non-ionic TRITON combines several important properties. Of first interest to formulators is its ability to do an excellent cleaning job *without* the handicap of excessive foaming.

Other important qualities of TRITON X-114 are:

1. Detergency on hard surfaces (china, silverware, steel and other metals) and on fabrics (home laundries) as outstanding as that of TRITON X-100.
2. Rapid wetting and good rinsing.
3. Ease with which it can be "built" on alkalies.
4. Compatibility with non-ionic, anionic and cationic surface active agents, and stability over a wide pH range.

The high detergency—low foam qualities of TRITON X-114 make it of particular interest in formulating compounds for mechanical dish washing, automatic home laundering, janitorial work and metal cleaning. In fact, TRITON X-114 should be tried in all those operations requiring high detergency and controlled foam.

Write us for more information about TRITON X-114 and for free experimental samples.

CHEMICALS FOR INDUSTRY

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Representatives in principal foreign countries

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agents, employees, successors and assigns, and all other persons acting under, through or for each defendant, be perpetually enjoined and restrained from continuing, maintaining or renewing the foregoing violations and from entering into or continuing or claiming any rights under any contract, agreement or understanding in restraint of or to monopolize interstate trade and commerce in the production and sale of household-soap and household-synthetic detergents or in the purchase and sale of the principal materials used in soap and synthetic detergents.

"4. That each of the defendants Procter, Colgate and Lever be dissolved into separate and independent organizations, and that each such defendant's plants and other assets for the production and sale of soap and synthetic detergents be divided among the new organizations, so as to prevent continued monopolization and to restore competitive conditions.

"5. That each of the defendants Procter, Colgate and Lever be required to resign its membership in The Association of American Soap and Glycerine Producers, Inc. and be enjoined from again becoming a member thereof or of any other trade association similar to the defendant Association.

"6. That the defendant, The Association of American Soap and Glycerine Producers, Inc. be enjoined from having as members any other defendant in this action or any person, firm or corporation acquiring, pursuant to any order of dissolution entered by this Court, any of the assets of any of said defendants.

"7. That the Court adjudge and decree that each of the defendants Procter, Colgate and Lever has used trademarks, patents, patent rights, and technical information, owned or controlled by them, unlawfully in instituting, effectuating and maintaining the aforesaid violations of Sections 1 and 2 of the Sherman Act, and that the plaintiff have such relief with respect to the defendants' trademarks, patents, patent rights, and technical information as Court may deem necessary or appropriate to dissipate the effects of the defendants' unlawful activities and to promote free and unfettered competition in the production and sale of household - soap and household - synthetic-detergents.

"8. That the plaintiff have such other and further general and different relief with respect to the organization, functions and operations of the defendants as the Court may deem appropriate or necessary to establish free and unfettered competition in the production and sale of household soap and household synthetic detergents, as the nature of the case may require and as the Court may deem proper in the premises.

"9. That pursuant to Section 5 of the Sherman Act, an order be made and entered herein requiring such of the defendants as are not found within this District to be brought before the Court in this proceeding as parties defendant, and directing the Marshals of the District in which they severally reside or are found to serve such summons upon them.

"10. That the plaintiff recover the costs of this suit."

Dishwash. Detergents

(*From Page 43*)

to prepare soiling medium fresh each time. Choice of approach will depend upon the amounts expected to be used, the sensitivity of the ingredients to ageing, and whether a large pilot batch of the soil is needed which then can be used for a large number of subsequent tests.

Summary

STUDY of the five tables summarizing seventeen selected papers shows five general methods for estimation of soil removal (if for convenience photometric transmittance, reflectance, scattering and gloss may be combined as one); eight different methods for application of soil to test surface, with many investigators preferring a dipping method; seven different general types of washing machines; six different test surfaces; and fifteen different soiling media. Apparently there is less agreement on the soil to be used than on any other of the factors shown.

An investigator starting work in the dishwashing field could choose several fields for investigation; bacteriological cleanliness, hard water film formation, soil removal and prevention of deposition by detergent formulation, and machine design for more effective cleansing. With the exception of machine design (and even here a standard machine for comparison would be helpful), most laboratory work could be initiated in a home washer or small scale commercial washer, using the surfaces ordinarily encountered. Adequate methods for estimation of cleanliness of surface are available, but selection of the soil or soils to be used is the most important decision to be made.

Any method may be technically interesting or enlightening but may have little practical significance. The material or machine developed must meet consumer acceptance and the test method must be a means for predicting whether the product will perform acceptably "in operation."

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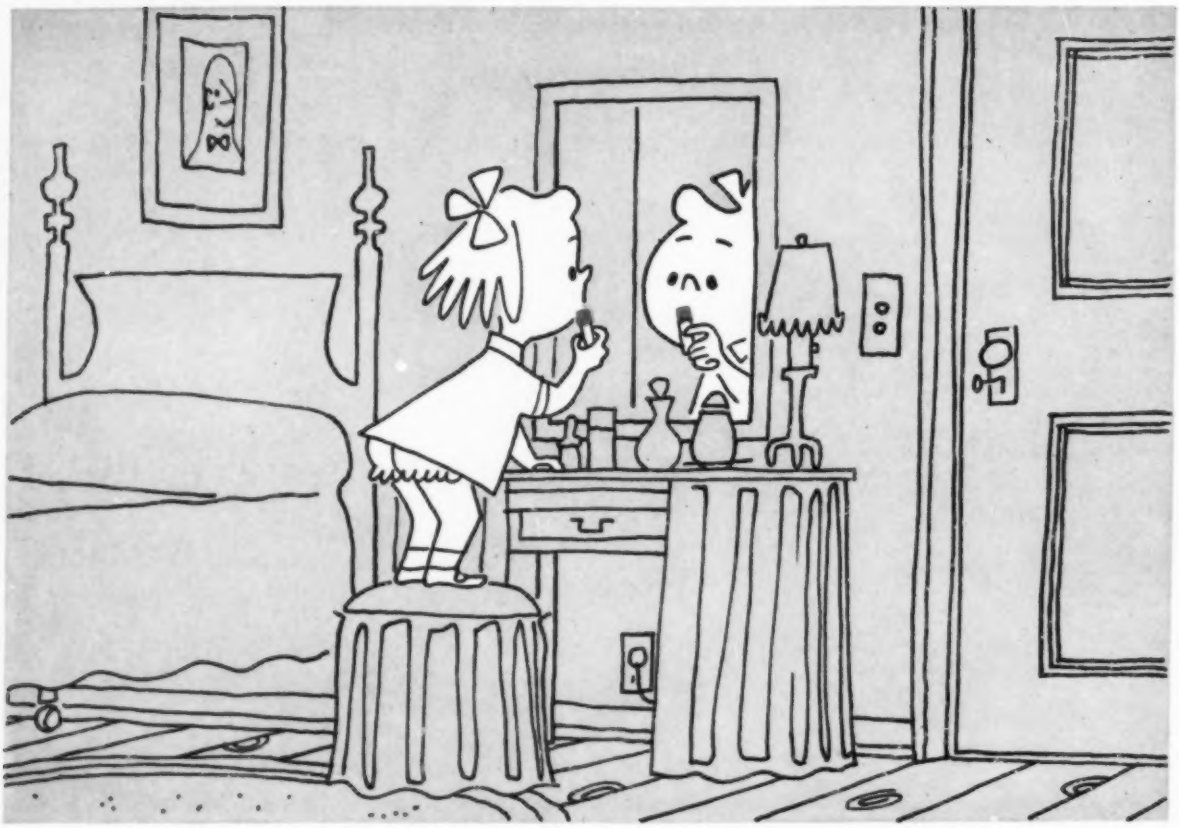
National Buys Cans, Inc.

Acquisition of all of the outstanding stock of Cans, Inc., Chicago, was approved by stockholders of National Can Corp., New York, at a special meeting held recently in Wilmington, Del. Shareholders authorized issuance of 130,000 shares of National Can's authorized but unissued common stock of $10 par value, in exchange of all outstanding stock of Cans, Inc.

The meeting also approved execution of a contract whereby R. S. Solinsky will be able to purchase an aggregate of 40,000 common shares of National Can. Mr. Solinsky was elected president and chief executive officer of National Can, while C. L. Thompson, president and chairman of National Can continues as chairman. Mr. Solinsky and two others, to be selected by present stockholders of Cans, Inc., will be elected directors of National Can.

When a lady looks bewitching



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PRODUCTION Clinic

By E. G. Thomssen, Ph.D.

THE incentive to plan ways and means of increasing both the volume of one's business and its profits, particularly, is stronger at this time of year than during other seasons. One way to improve the stability of a business is to manufacture the products one sells. This applies particularly in the case of the sanitary chemicals field.

It is evident that when a firm sells products it does not manufacture itself, there are two profits to be made before the item reaches the ultimate consumer. The non-manufacturer feels he is at a price disadvantage in competition with those who sell the products of their own manufacture.

Because the question of whether or not to manufacture certain items arises frequently, it is of interest and importance to consider some of the factors involved. Such considerations are especially timely now when capital investment costs are inflated.

Before deciding to go ahead with the manufacture of any item, a thorough study of such a step should be undertaken. It is advisable not only to consult with members of one's own organization, but to seek outside advice from those who are familiar with the current status and future possibilities of the items whose manufacture is under consideration. The search for information must be complete in all respects. Among the more important points on which data should be obtained are costs, plans, personnel, overhead expenses, financing, geographical location, diversification and purchasing procedure. Further elaboration of these points should prove helpful.

The first point to be considered is the important problem of costs. It is absolutely essential before beginning to manufacture to know whether such an operation will be profitable. It is not only a question of determining at what cost an item can be made. It is also vital to know whether there is sufficient volume of sales to make the operation pay and thus warrant the installation of the needed equipment. In many cases, it is found that even

DR. THOMSSEN

though a product can be made more cheaply, it is more economical to buy from private brand houses because the operating costs for small volume operations are too high. On the other hand, equipment may be installed that is flexible enough to process a number of similar items. In this way the equipment may be operated a sufficient number of days so that an overall saving may be enjoyed. A good example of this is dry mixing. Here cleansers, hand soaps, powdered insecticides and dish washing compounds all can be made using the same mixer.

There should be a definite plan covering the types of products to be made and outlining their method of manufacture. Thought must be given to the expansion of future production. It is wise to have greater manufacturing capacity than is needed immediately than to be cramped. To ascertain capacities, it is good practice to go back two to five years and calculate sales of the product in pounds or gallons. Compare these figures with current sales and then estimate the expansion possibilities five years hence. Provide space for expansion in suitable places as soon as the first pieces of machinery are set up. A careful survey of available floor space, made when the equipment is decided upon, may prevent many a future headache.

The ability of the personnel to handle a plant must be given full consideration. The man who is going to install and operate it is better equipped for his duties if he has had at least five years experience in chemical manufacturing and is well versed in the particular item or items which are to be made. It is poor economy to put an untrained man who has never handled help in charge of a new venture. It is far more difficult to start up a new plant than it is to step into one that has been in operation for years. Unless the top production man is experienced, the workmen under him will not put forth their best efforts.

The next goal is to keep down the overhead expense. People who have not had manufacturing experience are apt to become over-enthusiastic and go in for a lot of frills or overstaffing. This often leads to failure. It is far better to be modest at the start and add the decorations in later years when the undertaking has proven itself to be profitable.

The financing of such an undertaking must be given very close scrutiny. Not only is it necessary to have sufficient working capital to pay for current, increased expenses, but financial reserves should be available. A new manufacturing project invariably takes more money than was originally anticipated. The first year is particularly difficult. Business volume may fluctuate. In either case, more capital is necessary and bank loans are not too easy to obtain for new business ventures. A cash reserve may be the deciding factor in success or failure during this crucial period.

Closely allied to the financial question is the problem of purchasing raw materials, etc. It is necessary to keep most of the expenditures in the

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Furthermore, the manhours required to handle the unloading were considerably reduced because fewer cars were needed to supply the same tonnage of Caustic.

The operation used to save both manpower and dollars is the Columbia-Southern patented process that incorporates unloading and diluting in a single operation. The assembled unit (note illustration) is compact and relatively inexpensive.

Columbia-Southern's technical service staff will be glad to make recommendations regarding the cost and location of an unloading unit as well as assist with the unloading of the initial shipment.

Shipments of 73% are made in Columbia-Southern's specially designed tank cars that have a patented lining which prevents metallic contamination in transit. Also, these cars have the fusion welded tank, improved insulation, and many other features.

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form of liquid rather than fixed assets. Such assets as machinery, packages and raw materials cannot be liquidated readily, but cash in the bank and bills receivable can be collateralized quickly in making bank loans.

While these considerations are important in opening up a new manufacturing plant, others should not be overlooked. Among these is the distance of the plant from the market in which the products are to be sold. Freight has become an increasing cost item. Wage scales are lower in certain localities. City ordinances, insurance rates, availability of land for future expansion, parking space, tax rates, etc. must be considered. Too much dependence on the volume of a single item, selling well currently, is hazardous. Some unforseen situation may arise to reduce its sale sharply. Or again, one or more large users may quit buying. Some diversification of products should be planned. A search should be undertaken for certain specialties that afford more profit than highly competitive, volume products.

These points cover some of the problems involved in manufacturing. There are others. The picture presented may not be too bright. In spite of the difficulties, most manufacturers who put new plants into operation recently in the sanitary chemicals field have succeeded. The paramount reason for this is that the urge to push and sell an item of one's own manufacture is much greater than selling the product of another. Selling, in the last analysis, is of prime importance, and if sales are increased, all other factors being equal, success is assured.

Drum Rinser

A DRUM rinser that affords a fast, practical method of cleaning steel drums is offered by Gilbert & Parker Manufacturing Co., West Springfield, Mass. Less than a minute is required to clean every inner part of a dirty drum with this new method. Such substances as sand are removed without draining. Used drums need not be sent to reconditioners if the Gilbert & Parker device is employed.

Size Reduction Roller Mill

A ROLLER mill that is versatile for size reduction of dry products is offered by Sprout-Waldron Co., Muncy, Pa. The company offers to make an analysis for any reliable manufacturer who has a problem in this field. The roller mill can be adapted to pulverize, granulate, shred, flake or crack various dry materials.

Dimer Acid

"EMPIRE 995" dimer Acid is finding many unusual applications in industry. Potash and soda soaps are made from this material. A liquid soap having a 30-35 percent anhydrous soap content may be made from the new Emery fatty acid. Both soda and potash soaps based on "995" possess good emulsifying properties. If water insoluble soaps of bivalent metals are desired, they can be prepared directly from these water soluble soaps. A descriptive bulletin that provides data, specifications and characteristics of dimer acid may be had by writing to Emery Industries, Cincinnati 2, O.

Barrel Liner

THE use of polyethylene type liners for barrels, drums and cartons is increasing rapidly. Visking Corp., Terre Haute, Ind., is featuring its "Visqueen" liner as an improvement over the pure polyethylene film bags. Their product, covered by patents, includes other materials. The advantages of using liners of this type are that they are more economical to use in packing hydroscopic substances, they eliminate cleaning and reconditioning of iron drums and provide a low cost method of shipping semi-solid substances in cartons.

Liquid Meter

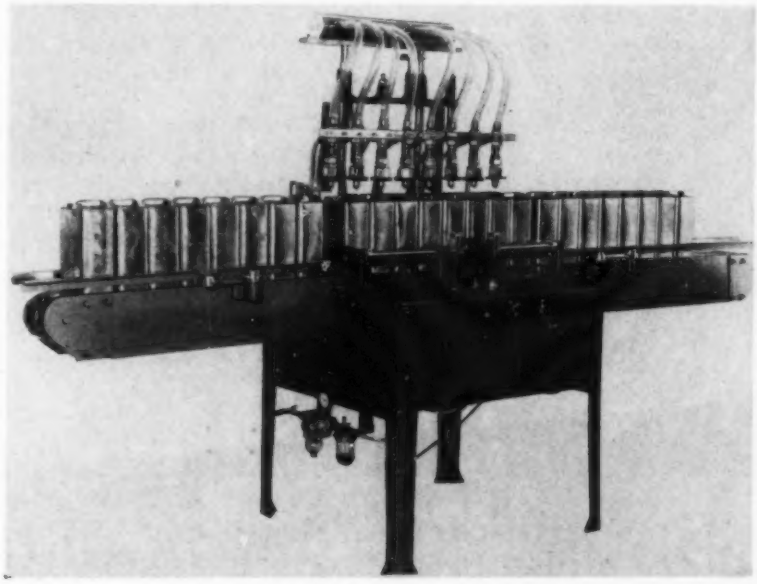
BOWSER, Inc., Fort Wayne 2, Ind., has built liquid meters in large volume for many years. A meter that is finding wide use in the

(*Turn to Page* 89)

New Perl Filler

Announcement of a new fully automatic straight line bottle and can filling machine requiring no operator was made recently by Perl Machine Manufacturing Co., Brooklyn. Built in three sizes, the new unit accommodates, without change of parts, metal, glass and plastic containers ranging in size from one-half ounce to five gallons.

Viscous and foamy liquids can be filled by gravity, pressure or vacuum. The machine, which is of simple design, operates at speeds of from 60 to 100 cans or bottles per minute, with fully automatic filling. Electro-pneumatically controlled safety devices are installed to prevent damage to containers or valves.



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Products and PROCESSES

Skin Detergent Paste

A paste consisting of light liquid petrolatum, a deodorized hydrocarbon boiling in the kerosene range, lanolin, and aluminum stearate removes adhesive tape, theatrical make-up, gum, paint, shoe polish, grease, etc., from skin and hair without irritation, U. S. patent 2539531.

Improved Cationic

A disinfectant and detergent composition for which improved efficiency and non-toxicity to human beings or to farm and domestic animals is being claimed, is the subject of British patent 676895. The detergent comprises a cetyl trimethyl ammonium halide (10 percent), a non-ionic neutral wetting agent (10 percent), an alkali phosphate (28 percent), and an alkali silicate (52 percent). As alkali phosphate the use of tetrasodium pyrophosphate or hexametaphosphate (Calgon) is suggested. The product is said to be odorless and non-irritant. An aqueous solution of the composition is claimed to clean and degrease thoroughly and to disinfect in one operation, but it must not be mixed with soap or soapy water, and is devoid of organic anionic detergnts.

Syndet Production Method

A new method for preparation of detergents, claimed to have qualities superior to those of the best soaps, and which can be made from the same primary materials as the soaps, has been developed by H. Brunel, Paris, France, and is covered by British patent 680200. It involves preparation of detergents from fatty acid glycerides or sulfonatable fatty acids and colophony resins. The primary material is treated with at least 15 percent of sulfuric acid (60°Bé) which is introduced progressively and with agitation at a temperature above 20°C, then an aqueous solution of sodium hydroxide of a concentration of 15 to 20 percent is added to the reaction mixture under agitation. The addition of sodium hydroxide ceases when an aqueous layer forms below an oily product layer. Decanting takes place while the mass is still warm, so as to separate the oily layer from the aqueous layer which contains sodium sulphate and excess sulfuric acid. The oily layer is treated with further aqueous solutions of sodium hydroxide, which are added progressively and with stirring until the cessation of all exothermic reactions. With this method all necessity of heating is avoided and the salting out is effected without adding a salt solution. The resulting products are claimed to possess excellent washing properties.

Bamag-Wecker Process

The Bamag-Wecker process is described in a six-page illustrated brochure which is being distributed by General Industrial Development Corp., New York, exclusive U. S. agents for Bamag-Meguin A.G., Berlin, Germany. The process is used to increase the yield in the distillation of fatty acids and in the deacidification of oils.

Metallic Filter Cloths

Metallic filter cloths are among the products described in a new 126-page illustrated catalog issued recently by Multi-Metal Wire Cloth Co., New York. It includes a report on 18 months research into the flow characteristics and particle retentivity of metallic filter cloths conducted at Columbia University. The book contains specifications, characteristics and uses of wire cloth and filter cloth, useful to the buyer of these products and to the engineer designer of units incorporating them.

Amaza Offers New Cleaner

A new hand cleaning compound, designated "E-Z-Go", was introduced recently by Amaza Laboratories Inc., Cleveland. The new product, available in liquid, cream or abrasive form is said to contain lanolin and special antiseptics. It is designed to clean hands of hard to remove industrial soil, and can be wiped or rinsed off in hot or cold water. The cleaner is available in 14 ounce cans, four pound cans, seven pound cans, 35 pound pails, and 100 pound drums. The liquid type comes in one gallon cans and 55 gallon drums.

Issues Glycol Booklet

"Carbowax" poly ethylene glycols are listed and described in a 49-page illustrated brochure issued recently by Carbide and Carbon Chemicals Co., Division of Union Carbide and Carbon Corp., New York. Physical properties appear in the form of tables and charts, technical and U.S.P. specifications are listed. Shipping and storage data for these compounds are also shown. Uses of water-soluble liquid and solid polyethylene glycols, and methoxy polyethylene glycols in various industries are described and illustrated by a number of formulas. These include a brushless shaving cream, and cleaners and polishes, such as a detergent cake, metal polishes, ink remover sticks, etc.

Cos. Chemists Hear Lieb

William E. Lieb, chief chemist of the cosmetic division of Allen B. Wrisley Co., Chicago, spoke on soap shampoos before the Chicago chapter of the Society of Cosmetic Chemists, January 13 at Henrici's restaurant. The meeting also heard Alfred A. Michaud, Chicago representative of the American Alcolac Corp., on shampoos based on synthetics.

MM&R Adds to Staff

Magnus, Mabee & Reynard, Inc., New York, recently announced appointment of Frank A. Herrick as sales representative for Minnesota and North and South Dakota, with headquarters in Minneapolis. Mr. Herrick replaces R. J. Hutchinson.

Appointment of Miss Ann Hoop to the Chicago office staff was announced at the same time. She is in charge of statistics, sales records, etc. Both new staff members are working under A. R. Jensen, MM&R's midwest head.

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and the pan...

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NEW Patents

The information below is furnished by patent law offices of

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The data listed below is only a brief review of recently issued pertinent patents obtained by various U. S. Patent Office registered attorneys for manufacturers and/or inventors. Complete copies may be obtained direct from Lancaster, Allwine & Rommel by sending 50c for each copy desired. $1.00 for Canada. They will be pleased to give you free preliminary patent advice.

No. 2,613,192. Polishing Composition, patented by Herbert Honig, New York, N. Y. As a new composition of matter, a polishing agent is described in the patent, comprising in combination, resin varnish containing phenol - formaldehyde resin ranging from 10 to 15 per cent by weight, a liquid soap in the form of chlorophyl containing pine oil soap ranging from 10 to 14 per cent by weight, whereby said formaldehyde resin and said soap are present within said agent in substantially equal amounts, 8 to 10 per cent by weight of turpentine, 15 to 20 per cent by weight of lemon oil with the addition of paraffin oil amounting to 15 to 20 per cent by weight, whereby said lemon oil and said paraffin oil are present within said agent in substantially equal amounts and each being present in a larger amount than that of each of said phenol-formaldehyde resin and of said soap, and with the further addition of a cleansing vehicle consisting of a mixture of acetic acid in the amount of 12 to 16 per cent, and alcohol in the amount of 5 to 8 per cent, the remainder being water.

No. 2,614,061. Method of Preparing DDT Dispersions Using Carboxy Methyl Cellulose, patented by Conrad V. Coash, Chicago, Ill., assignor to Sherwin-Williams Co., Cleveland, Ohio, a corporation of Ohio. A process of manufacture of a fluid water reducible concentrated pest control composition is described which comprises intermixing at least 35 per cent by weight of 1,1-bis(p-chlorophenyl)2,2,2 trichloroethane, more than 0.25 per cent and less than 2 per cent by weight of a high viscosity type water soluble alkali metal salt of carboxy methyl cellulose in not less than 45 per cent of water and passing the aqueous slurry thus formed through a clearance existing between two surfaces of an attrition mill, one surface of which is rotated at high velocities as compared with the other, thereby inducing a high shearing stress within the said aqueous slurry.

No. 2,615,847. Alkaryl Sulfonate Detergents, patented by Kenneth M. Thompson, Aldan, Pa., assignor to Atlantic Refining Co., Philadelphia, Pa., a corporation of Pennsylvania. A detergent is covered in which the active ingredients comprise a mixture of 95 per cent to 75 per cent of a water soluble salt of a mono-alkylated aryl sulfonic acid in which the alkyl group contains from 9 to 15 carbon atoms and 5 per cent to 25 per cent of a water soluble salt of an alkylated aryl sulfonic acid from the group consisting of salts of xylene sulfonic acid and salts of ethyl benzene sulfonic acid, said water soluble salts being prepared by subjecting to the action of a sulfonating agent a mixture of a mono-alkylated aryl hydrocarbon in which the alkyl group contains from 9 to 15 carbon atoms and a quantity of an alkylated aryl hydrocarbon from the group consisting of xylene and ethyl benzene, such that upon sulfonation and neutralization of the mixture, the salt of the sulfonic acid derived from the last-mentioned alkylated aryl hydrocarbon will constitute between 5 per cent and 25 per cent of the total salts of the sulfonic acids, and recovering the resulting sulfonic compounds from the sulfonation mixture.

No. 2,613,218. Vacuum Neutralization of Detergents, patented by Alan C. Stoneman, San Marino, Calif., assignor to Purex Corp., Ltd., South Gate, Calif., a corporation of California. The patent describes the method of neutralizing an acidic stock of the class consisting of sulfonated and sulfated organic compounds having an aliphatic radical containing between about 8 to 18 carbon atoms and the alkali metal salts of which have detergent properties, that includes converting said stock to a slurry of a water dispersable alkali metal salt thereof by discharging a mixture of said stock and an aqueous solution of an alkali metal hydroxide in finely divided form openly and through an extended path within the atmosphere of a zone maintained at an absolute pressure between about 9 to 88 mm. of mercury and at a temperature between about 50° to 120° F., limiting dehydration of the mixture to produce a flowable slurry, and flowing the slurry from said zone.

No. 2,614,964. Process of Producing Glycerine, patented by Benjamin T. Brooks, Old Greenwich, Conn., assignor to The Glycerine Corporation of America, Inc., New York, N. Y., a corporation of New York. The method of producing glycerine from molasses is described which comprises the steps of diluting the molasses with approximately 3 times its weight of water, adding an alkaline carbonate to the molasses in amount only sufficient to produce a pH value of about 7.5, fermenting the resulting solution with yeast, filtering off the yeast, thereafter distilling the residue, fortifying the undistilled solution with undiluted molasses, repeating the steps of fermenting, filtering and distilling off alcohol until the undistilled solution remaining contains at least 15 per cent of glycerine, thereafter dialyzing the undistilled concentrate, and separating glycerine from the dialysate.

No. 2,613,215. Treatment of Glyceride Oils, patented by Karl F. Mattil, Chicago, Ill., assignor to Swift & Company, Chicago, Ill., a corporation of Illinois. The process of producing a relatively non-reverting glyceride oil from a reverting glyceride oil is covered, which comprises hydrogenating said reverting oil containing unsaponifiable matter to reduce the iodine value of the said oil by about 4 to 20 points, subjecting the the unsaponifiable fraction in an unoxidized state to a frationation operation in the presence of a liquefied partially hydrogenated oil containing normally gaseous hydrocarbon solvent under temperature conditions whereby the resulting solution separates into two phases, one phase being rich in unoxidized unsaponifiable matter and another phase being relatively rich in nonreverting glyceride oil, and separating said phases.

No. 2,615,149. Waxy Triglycerides, patented by Frank L. Jackson, Cincinnati, Ohio, assignor to The Procter & Gamble Company, Cincinnati, Ohio, a corporation of Ohio. The patent describes a triglyceride of the formula

$$\begin{matrix} R'CO\cdot OCH_2 \\ RCO\cdot OCH \\ RCO\cdot OCH_2 \end{matrix}$$

wherein R'CO· is the acyl radical of a fatty acid of 12 to 22 carbon atoms and each RCO· is selected from the group consisting of acetyl, propionyl and butyryl radicals, said triglyceride being in a waxy translucent alpha crystaline form as determinable by melting point and X-ray defraction measurements.

SOAP PLANT *Observer*

By John W. McCutcheon

IN AN earlier discussion of glycerine losses it was shown these losses occur through (1) sloppy operation, (2) extraordinary circumstances of operation, (3) equipment design, (4) bookkeeping and (5) controlled losses.

These are the same seven points mentioned in the October column but stated from a different angle. Point 2 was covered. For example: extraordinary circumstances of operation include such factors as foamy lyes requiring heavy treatment. These factors are generally beyond the power of the glycerine operating department to correct and it is quite unfair to place the blame on that department. On the other hand, if it is economical for the plant to make soap from foots, it is equally unfair for the glycerine recovery department to blame all of its losses on this factor.

Difficulty of evaporation through foaming lyes can be caused just as readily by the poor treatment of good lyes as by the good treatment of poor ones. To appraise this situation requires someone who understands what is involved and someone on the management level. This person should be one step above the direct control of either the glycerine or soap boiling process. Generally, this is the chemical supervisor.

In small companies, arbitration to fix the responsibility for such losses must be handled by the plant manager or by an independent consultant called in for the purpose

A few guide posts may be helpful. Lyes from soap stocks entirely of foots can never be treated to prevent occasional foaming over in the evaporator when such evaporators are running close to their rated capacity. Lyes from soap stocks with less than 40 percent combined nut oils, foots or rosin, can be treated so that losses through boiling-over in the evaporator need never occur. One boil-over in a month of operation can

easily account for a one percent loss of glycerine. Every evaporator should have a means of determining if a boil-over occurs, independent of the operator's observation. This may be a temperature recorder, since any boil-over involves a change of heat balance. It may be a vacuum recorder. It may be an analysis for salt from a continuous sampler placed on the bootleg of the vacuum pump or a periodic sample taken from the hot well. Losses in treatment have been discussed except as to the size of the loss. Excluding losses in handling covered by point 1 above, treating losses should not exceed 0.2 percent on five percent lyes or 0.3 percent on 10 percent lyes when presses are not water washed.

In regard to bookkeeping, it was pointed out (October, 1952) that an error of 0.01 percent in the glycerine analysis of a five percent glycerine lye represents an unknown loss of 0.2 percent. In one particular case, the writer, after a lengthy investigation, arrived at a figure five times as great as this. Here, however, the foots content of the soap stocking material was approximately 50 percent of the whole. For a more general discussion of bookkeeping methods the reader is referred to the February, 1950 issue of *Soap & Sanitary Chemicals*, P. 91.

Sloppy operation (point 1 above) perhaps is too harsh a term to use. Pumps will break down and in time tanks will leak. The only safe way to control losses of this sort is to eliminate all sewer drains. If this cannot be done, then curbs should be put around pumps and tanks. Pipe lines generally are not a problem except in very old plants. Losses in this category should be zero!

Equipment design (point 3 above) is often a nasty one to handle. Some loss is bound to occur even under ideal conditions, particularly when the equipment is being run to capacity. The writer had occasion to check unknown losses on a vertical type still handling a saponification crude, which is comparatively clean compared with a soap crude. Losses on a total of eleven #- consecutive batches were as follows:

Import of crude as glycerol	135,719 pounds
Output as refined 99% dynamite grade glyc.	133,182 pounds
Output as refined 100% glycerine	131,850 pounds
Output as pitch, 4543 lbs. @ 39.2% glyc.	1,781 pounds
Unknown loss	2,088 pounds

The decomposition loss was 1.6 percent which is considered good. The pitch loss for a soap crude would be considerably higher. In the above equipment, losses had been erratic due to fluctuation of the temperature in the reflux column which, in turn, was caused by the irregularity of the water sprays. Small pieces of iron oxide were flaking off the inside of the pipes leading to the nozzles and were plugging them. A replacement with brass piping plus the use of a protective screen, corrected the fault. Generally, the correction of a faulty piece of equipment, apart from repair and upkeep, involves considerable engineering skill which requires help beyond the skill of the operating department.

Controlled losses are those which involve decisions as to the discarding of process materials such as pitch, salt, press cake, etc. When recovered salt, for example, reaches

seven percent sodium sulphate content it is generally good practice to discard it due to increased difficulties in recovery and decreased value as a soap graining agent. The glycerine content of such salt should be below 2½ to three percent. Glycerine pitch treatment is generally uneconomical because of the wages for labor involved.

Liquid Meter

(*From Page* 81)

chemical industry is Bowser's "Xacto". This meter is made especially to meter liquids used in processing operations accurately and dependably by a new method. Complete data on the meter may be had upon written request.

Book on Packaging

Hinde & Dauch Paper Co., Sandusky, O., recently announced a new booklet "Pack to Attract", which emphasizes that in today's market the difference between success and failure of any product may be the packaging. The illustrated booklet, referred to as "a portfolio of merchandising ideas", carries photographs of packages stressing certain points of package design. Use of the package as a sales feature of the product is stressed. It also emphasizes that a good corrugated package virtually becomes a salesman for the dealer, stimulating the buying mood, putting the product under a spotlight, telling a convincing sales story, demonstrating product quality, product advantages, product uses—actually selling the merchandise. Copies of the booklet are available on request.

New Florasynth Catalog

Florasynth Laboratories, Inc., 1513 Olmstead Ave., New York 61, N. Y., recently announced the issu-


A Guide To A Better Beginning

Wholesale Price List

FLORASYNTH LABORATORIES INC.

Manufacturing Chemists

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FOREIGN AFFILIATES

ance of a new wholesale price list of its line of aromatic chemicals, essential oils and related materials. The newly issued, 28-page price list is available through any of Florasynth's 10 offices in the U. S., or through foreign affiliates in Mexico, Canada and South America. Special oils for liquid soaps, shampoos and chemical specialties are featured in the new price list and catalog.

Also announced at the same time is the availability of charts showing suggestions for use of certain designated products, or breakdown of specific contents in certain commodities to facilitate application of such materials used for a large number of industrial purposes.

New Filling Machine

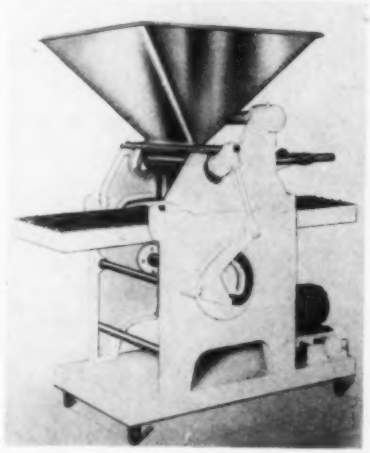
A new, high speed, four line filling machine that fills all types of viscous products including oils, chemicals, etc., has recently been developed by Filler Machine Co., Philmont Club Station, Philmont, Pa. The new machine fills all sizes and types of containers by the bottom up and clean-cut-off filling method. It fills up to 80 containers per minute and has a range of from four ounces to gallons. A single adjustment centers different size containers under the filling nozzles and the upper filling head assembly adjusts easily for all container heights in clean-cut-off-filling. New double linkage control for the bottom fill elevator provides efficient and smooth operation in bottom of filling. Containers are indexed through the machine by a combination walking beam and pin lug type push rods which minimize starting and stopping impulses. Piston stroke is regulated by a single handwheel so that the machine does not have to be stopped for quantity adjustment.

A ¾ hp motor supplies power for the new Geyer filling machine which stands five feet high and occupies a space three by five feet. Four point suspension permits easy cleaning under the machine. The unit can be equipped with a separate motor driven agitator. An automatic jar feeder and unscrambling equipment are also available.

New Farac Tall Oil

The development of a new tall oil under the trade name, "Flextal" was announced recently by Farac Oil and Chemical Co., Chicago. According to the maker, for the first time high rosin fractions of distilled oil are available to industry in liquid form. "Flextal" is non-crystallizing. It can be used as an economical replacement for rosin-fatty acid mixtures. Light in color and bland in odor, "Flextal" is produced in rosin acid content of 37, 45 and 60 per cent. A folder giving specifications and data on applications is available by writing the company at 145th St. and Indiana Ave., Chicago 27.

New Filler Machine Co. unit



Bacteriostat . . .

(*From Page 37*)

large numbers in the cracks and crevices of the skin and also in the glandular ducts and hair follicles. They can apparently utilize the secretions of the skin as sources of nutrition and in so doing, they reproduce and serve as an inexhaustible source of recontamination to the surface of the skin. Many of these resident bacteria can be removed by very extensive scrubbing with a non-medicated soap or the application of quick acting germicides in high concentration. Neither of these two methods is entirely satisfactory because repeated application of such agents often dries or irritates the skin.

An appreciable reduction of resident skin bacteria can be accomplished by "Actamer" incorporated in topical agents such as soap, when used daily, over a period of time. The extensive toxicological and dermatological studies described above indicate that "Actamer" is safe and its strong substantivity to the skin assures a continuing bacteriostatic activity on the skin as long as such "Actamer"-medicated formulations are used.

In addition to the applications discussed, "Actamer's" general physical-chemical, biological, and toxicological properties are prompting investigations in other fields of application such as for use as an anthelmintic in veterinary medicine; as a fungus control agent in medicine; and as an industrial preservative.

Summary

A UNIQUE bacteriostatic agent, 2,2′-thiobis(4,6-dichlorophenol), "Actamer" has been described. This colorless, tasteless and essentially odorless, white crystalline product is practically insoluble in water but quite soluble in a number of organic solvents. Accelerated stability studies of the pure product, and various formulations of it, indicate that it is unusually stable and that its quality would be essentially unaffected under normal conditions of storage. Vapor pressure data and ionization constants are presented.

The compound, 2,2′-thiobis-(4,6-dichlorophenol), has exhibited extraordinary antimicrobial activity by both *in vitro* and by application-research techniques. It is particularly effective against the gram-positive bacteria and more specifically the gram-positive cocci that make up a large proportion of the normal resident bacterial flora of the skin. It is this type which has been frequently associated with the production of body odors. This compound shows moderate but specific activity against a number of the gram-negative species of bacteria and against some species of pathogenic fungi. By application tests, 2,2′-thiobis(4,6-dichlorophenol), used daily in bar soap at two per cent level, has been shown to reduce the number of resident bacteria on the skin of 12 subjects an average of 97.4 per cent after twelve days usage.

The unique property of substantivity to the skin is one of the paramount advantages of "Actamer." No other compound has been found to have stronger skin substantive properties than 2,2′-thiobis(4,6-dichlorophenol) without some undesirable effects. The acute oral toxicity, cumulative oral toxicity and cutaneous toxicity of 2,2′-thiobis(4,6-dichlorophenol) have been shown in test results described herein, to be unexpectedly low for this type compound.

These toxicity test results indicate safety in topically applied products and prompt investigation into its adaptability as an ingredient in personal hygiene preparations, in selected medicinal applications, and in other diversified fields where microbial control is a concern.

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Gen. Mills Names Two

Hugh A. Hamilton and Charles Greve have been named directors of fatty acid sales, western territory and eastern territory, respectively, for the chemical division of General Mills, Inc., Minneapolis, it was announced recently by Sewall D. Andrews, Jr., division vice-president and general manager. Both men's headquarters are in Minneapolis. Mr. Hamilton joined the company in 1947 as technical director of the Chemical plant at Kankakee, Ill. Mr. Greve joined General Mills in 1946 as a salesman in the chemical division in Minneapolis. He returned only recently from 21 months duty in Korea.

Appoints Virginia-Carolina

Earl F. Clark, manager, heavy chemical department of Cowles Chemical Co., Cleveland, recently announced the appointment of Virginia-Carolina Chemical Co., Richmond, Va. as a dealer in Cowles anhydrous detergent silicates in Southeastern United States.

The chemicals division of the Virginia-Carolina Company will handle Cowles "Drymet" anhydrous sodium metasilicate, "Dryorth" anhydrous sodium orthosilicate and "Dryseq" anhydrous sodium sequisilicate. These detergent silicates are alkaline cleaning agents in themselves, and blend with other alkalies, soaps, rosin, synthetic detergents and other ingredients used in compounding floor cleaners, laundry products, metal cleaners, dairy cleaners, dishwashing compounds and other types of cleaners.

Sanitary Chemicals Section

"Here's a PROFIT-Making TIP you can't afford to pass"

Says Scotty Klenz-Aire

ou can make a FINISHED DEODORANT SPRAY

for only 75¢ a gallon

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IT'S AMAZING! IT'S ALMOST TOO GOOD TO BE TRUE!

Klenz-Aire Deodorant Oil—*which we firmly believe is the finest, most economical Deodorant Oil you could buy*—combines with formaldehyde and water to make a milky emulsion spray that . . .

- **will not break down or separate**
- **costs only 75¢ a gallon** ***(for the finished spray)***

This wonderfully effective spray kills all tobacco smells, cooking odors, destroys odors in public rooms, theatres, kitchens, apartment houses, rest rooms, schools, hospitals, taverns . . . and leaves a pleasant, fresh after-scent that people like!

Klenz-Aire Deodorant Oil makes a truly all-purpose spray. It works in any type of dispenser, including the new self-spraying plastic bottles.

We'll be glad to send you generous samples of Klenz-Aire Deodorant Oils for your own experiments, or our chemists will work with you in developing a finished spray of your own. *Why not write us today!*

ODORS AVAILABLE:

- Apple Blossom
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- Jasmin
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- Mint
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- Oriental
- Pine Needle
- Rose
- Sandalwood
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- Sweet Pea
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Before You Buy

Complete Aerosol Formulations

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APPROVED COMBINATIONS NOW AVAILABLE

CUSTOM-TAILORED blends of aerosol ingredients, all with complete research data and with approval from federal officials on the formulations, are now available from U. S. I. There are several formulations combining allethrin and/or pyrethrins with piperonyl butoxide, with and without thiocyanates and DDT.

Research data on the knockdown levels at 3, 10, and 15 minutes, mortality counts, and cost data on the whole range of combinations are available to help you decide on the best formulation for your products. U. S. I. experience and research in aerosol formulation makes available to you a wide range of choice — in ingredients, results and costs.

At the CSMA convention in December, many customers discovered that U. S. I. aerosol formulations were particularly advantageous as to cost and performance.

Also available:

1. *Pyrenone* aerosol concentrates (combinations of pyrethrins and piperonyl butoxide).*
2. *Individual ingredients: allethrin, pyrethrins and piperonyl butoxide.*

Before *YOU* buy, see U. S. I.

Call **or write the U. S. I. office nearest you for all the latest facts on aerosol formulation.**

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HOOKER SULFUR CHLORIDES

SULFUR DICHLORIDE

Formula: SCl_2
Molecular Weight: 103.0
Appearance: Brownish red liquid with pungent odor

TYPICAL PROPERTIES

Pour Point	below —78°C
Boiling Point:	decomposes above 40°C
Cl_2 Content	66%
Sp. Gr., 15.5°/15.5°C	1.638
Flash and Fire Point	none

USES

As a chlorinating agent where use of elemental chlorine is not feasible; in chloridizing certain metallic ores; reagent in preparation of organic anhydrides, drying oils and rubber substitutes; reagent for drying coatings of ink, paint or varnish.

SULFUR MONOCHLORIDE

Formula: S_2Cl_2
Molecular Weight: 135.0
Appearance: Yellow to reddish heavy liquid with pungent odor

TYPICAL PROPERTIES

Pour Point	below —80°C
Boiling Point	138°C
Cl_2 Content	52.5%
Sp. Gr., 15.5°/15.5°C	1.6885
Flash and Fire Point	none

USES

As an intermediate and chlorinating agent in manufacture of organic chemicals, sulfur dyes, and rubber substitutes; agent for cold vulcanization of rubber products; polymerization catalyst for increasing viscosity of vegetable oils.

For more information on items listed, drop a note on your letterhead to HOOKER ELECTROCHEMICAL COMPANY, Buffalo Avenue and Union Street, Niagara Falls, N. Y.

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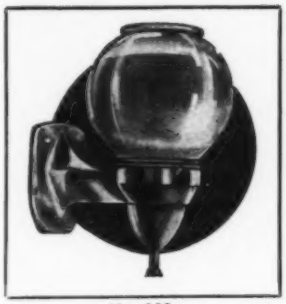

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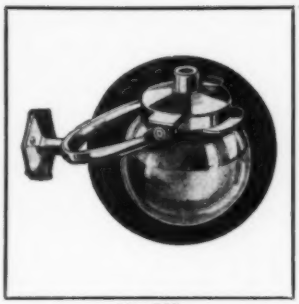

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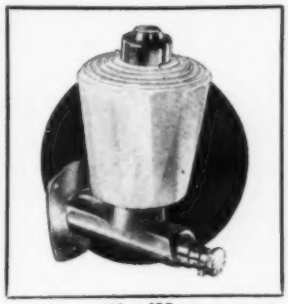

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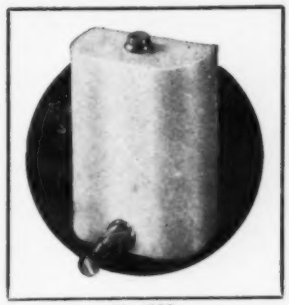

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FOR almost 40 years, leaders in the chemical specialties industry, large and small, have been active in CSMA affairs. They find that active participation in their trade association keeps them closely and promptly informed on matters of deep interest and importance. They find that exchange of views in open meetings can aid in solving many of their own individual manufacturing and testing problems. They find that the prompt and complete bulletin service of CSMA keeps them abreast of matters vital to their businesses — on what lies ahead and what is being done about it.

If you are in the field of disinfectants, deodorants, insecticides, floor waxes, polishes, soap and detergent specialties, aerosol products, or other chemical specialties, it could pay you to look into the advantages of membership in the CSMA for your firm. Can we send you further information?

H. W. Hamilton, Secretary.

CHEMICAL SPECIALTIES MFRS. ASSOCIATION — FOUNDED CSMA 1914

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Melvin Fuld, 1st Vice-Pres. — T. Carter Parkinson, 2nd Vice-Pres.

Peter C. Reilly, Treasurer — H. W. Hamilton, Secretary

New Nation-wide Du Pont
3 OUT OF 4 DEALERS

HOW THE SURVEY WAS CONDUCTED. An independent, nationally known research organization conducted the newest Du Pont Survey of the market for aerosol products. Retail dealers were interviewed in six major classifications of trade in 60 representative cities.

The study offers opportunity to review many basic points in comparison with findings of earlier surveys. To provide reliable answers, interviewers talked with as many people (owners, managers, assistants, and clerks) as were necessary to obtain a satisfactory report. This proved particularly important in connection with department stores which frequently employ buyers, clerks and others best qualified to discuss specific items.

The survey itself was conducted during the month of July 1952, and the data obtained has since been assembled and condensed. This sixth annual Du Pont Survey "Digest" of the market for aerosol products is the only report of its kind.

WHERE THE SURVEY WAS MADE. *The 60 cities listed below represent a cross-section of the market for aerosol-packed products throughout the country. It will be noted that they include large metropolitan cities, medium-size centers and smaller shopping areas.*

Albuquerque, N. Mex.	Dallas, Texas	Memphis, Tenn.	Pittsburgh, Pa.	Shreveport, La.
Amarillo, Texas	Denver, Colo.	Miami, Fla.	Portland, Me.	South Bend, Ind.
Asheville, N. C.	Detroit, Mich.	Milwaukee, Wis.	Portland, Oregon	Spokane, Wash.
Atlanta, Ga.	Fresno, Calif.	Minneapolis, Minn.	Providence, R. I.	Springfield, Mass.
Baltimore, Md.	Grand Rapids, Mich.	Montgomery, Ala.	Rochester, N. Y.	Springfield, Mo.
Birmingham, Ala.	Houston, Texas	Newark, N. J.	St. Louis, Mo.	Syracuse, N. Y.
Boston, Mass.	Indianapolis, Ind.	New Haven, Conn.	Sacramento, Calif.	Topeka, Kansas
Chattanooga, Tenn.	Kansas City, Mo.	New Orleans, La.	Salt Lake City, Utah	Tulsa, Okla.
Chicago, Ill.	Lexington, Ky.	New York, N. Y.	San Francisco, Calif.	Utica, N. Y.
Cincinnati, Ohio	Little Rock, Ark.	Omaha, Nebraska	Savannah, Ga.	Washington, D. C.
Columbia, S. C.	Los Angeles, Calif.	Peoria, Ill.	Scranton, Pa.	Wheeling, West Va.
Columbus, Ohio	Madison, Wis.	Philadelphia, Pa.	Seattle, Wash.	York, Pa.

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BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

"FREON" SAFE

Survey Reveals NOW STOCK AEROSOLS

Important New Facts About Best Markets

Results of the sixth annual survey conducted by the "Kinetic" Chemicals Division of the Du Pont Company show that 3 out of 4 retail dealers interviewed from coast to coast now stock one or more aerosol products. The report contains a fund of information about this rapidly growing industry.

PURPOSE OF THE SURVEY. The Du Pont aerosol market surveys are designed as a service to the aerosol industry. They provide a complete picture of expanding markets for pressure-packed products of many kinds. Significant changes are shown in the distribution of aerosols. The study also analyzes dealer opinions and reveals important trends.

Whereas, only a few years ago, aerosol products were limited in number and uses, today there are hundreds of these products. These are steadily gaining in popularity, and an increasing percentage of retail dealers (now 82% on weighted basis) are stocking aerosols. Because of this rapid advance, a more extensive survey became necessary to keep pace with the progress of the industry as a whole. It is now proposed to conduct a dealer survey one year and a consumer study the next, alternating each year between the two. The current report, therefore, covers the field of retail sales outlets.

GREATLY EXPANDED STUDY. The new study embraces a total of 2,233 personal interviews conducted with qualified respondents in major retail outlets throughout the country. The selected retailers form a representative cross-section of retailers in six major classifications of trade. Approximately the same number of outlets were visited in each group.

The expanded study included sixty cities listed on the page opposite. They were carefully chosen to give coverage of various city-size groups.

IMPORTANCE OF STORE SIZE. An innovation of the current study is the classification of outlets as "large," "medium" and "small". . . based upon evaluation of individual stores in comparison with others of the same type in the same market area. The breakdown offers a better indication of marketing activities in the different store sizes and shows, for instance, that a greater number of large stores than of small stores carry aerosols.

DEALER REACTIONS FAVORABLE. Analysis of the opinion of retail dealers who stock aerosol products in all divisions of trade again shows that this comparatively new method of dispensing is steadily gaining importance. Increases in distribution of aerosols show up in all classifications. For example, insecticidal aerosol distribution through drug stores has reached 98% . . . showing proved acceptance.

SURVEY "DIGEST" SENT ON REQUEST. These are just a few of over 100 questions about aerosol products reviewed and answered in the current "Digest" of the Du Pont Survey. It's a comprehensive report and a copy of it will gladly be sent upon request.

In addition, if you want specific advice concerning the design, manufacture or marketing of one or more aerosol products, technical help may readily be obtained from the "Kinetic" Chemicals Division of the Du Pont Company . . . manufacturers of "Freon" propellents used in almost all pressure-packed products now available.

IMPORTANCE OF "FREON" PROPELLENTS. "Freon" propellents are widely used in the production of aerosols because, first of all, they are entirely safe. They are nonflammable . . . nonexplosive . . . virtually nontoxic . . . and their chemical make-up is such that they are highly satisfactory for all types of aerosols.

Give thought—now—to the possibility of pressure-packaging one or more of your own products. As the Du Pont Survey shows . . . the popularity of this method of dispensing is proving a big booster of sales. Write for your copy of the Survey "Digest" today. No obligation, of course. E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Div., Wilmington 98, Delaware.

PROPELLENTS

KINETIC

REG. U.S. PAT. OFF.

"FREON" is Du Pont's registered trade-mark for its fluorinated hydrocarbon propellents.

Copy call for...

1953 BLUE BOOK

Edition of
SOAP & SANITARY CHEMICALS

ADVERTISING copy for the 1953 BLUE BOOK Edition of SOAP & SANITARY CHEMICALS should reach us by February 1! If you have not yet given us instructions on advertising position facing your choice of product listings, this information should be sent to us immediately. Inasmuch as there may be conflicts in advertising positions, we suggest giving three preferences in order of choice.

Specifications for advertising copy and plates in the 1953 Annual BLUE BOOK Edition are the same as for regular issues of SOAP & SANITARY CHEMICALS. If additional information on this is required, please let us know immediately.

The 1953 BLUE BOOK will be out March 15 and will go to all subscribers to SOAP & SANITARY CHEMICALS. Copy closing date will be February 1.

For 25 years, the BLUE BOOK has been the standard reference volume and buying guide for the field of soap and detergent products, insecticides, disinfectants, deodorants, aerosols, floor waxes and other floor products, and other chemical specialties and janitor supplies and equipment. Its advertisements and listings have produced thousands of inquiries and orders.

* * * *

If you require a copy of the current BLUE BOOK to guide you in the selection of the best advertising position for your firm in the 1953 Edition, wire at our expense. Requests for any further information about the 1953 Edition should be made now by wire.

* * * *

Copy closing date February 1!

MAC NAIR-DORLAND COMPANY

254 West 31st Street **New York 1, N. Y.**

Use our experience to improve your insecticide profits!

Almost every week someone discovers new methods and new ingredients for improving quality and cutting the cost of insecticides. In the allethrin field this progress is so rapid that formulas should be frequently reviewed. Formula costs can often be lowered or formulas made more effective without raising the cost.

USE OUR ANALYSIS SERVICE

Let's check your formula. In a few days our technical experts can tell you just how efficient your present formula is. Their analysis will show whether we can redesign it to save you money—and *how much you can save.* It will show exactly how much the newest developments can do in making your product more effective. Our analysis service is free.

THERE'S NO OBLIGATION

Without obligation, you have the benefit of MGK's 50 years in business—experience that includes manufacturing, testing and formulating over 90% of the allethrin used to date. Some 12 million aerosols and thousands of gallons of sprays containing allethrin—all highly satisfactory to manufacturers and users—give further proof of MGK's know-how. This know-how is yours for the asking.

Since packing for next year will begin soon, we suggest that you send your formula now for analysis.

McLAUGHLIN GORMLEY KING COMPANY

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- **CARDIS-ONE** the hardest emulsifiable petroleum wax on the market.
- **CARDIS-ONE** gives greatest wear - resistant films.
- **CARDIS-ONE** gives scuff-proof films with highest gloss and durability.
- **CARDIS-ONE** is ready for you now. Ask for samples, specifications, suggested formulations, technical service.
- **CARDIS-ONE** is produced at the Warwick Wax Refinery, Chanute, Kansas, home of Cardis Waxes, America's most widely-used emulsifiable petroleum waxes.

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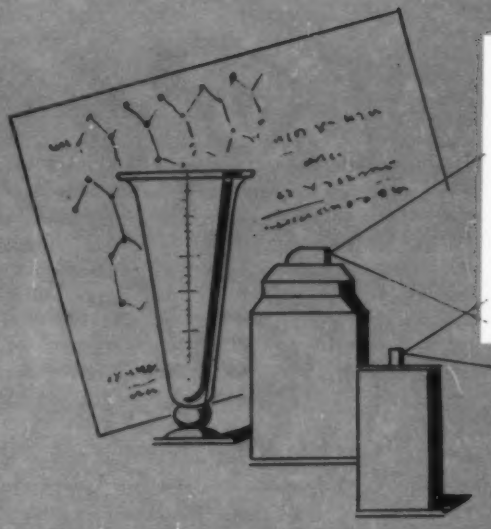

TYPICAL FORMULA No. 1

Thanite	1.00%
Pyrethrins	0.10
DDT	2.00
Piperonyl butoxide	0.80
Deodorized kerosene	1.40
Methylated naphthalenes	9.70
Freon 11 & 12 (1:1)	85.00
	100.00%

TYPICAL FORMULA No. 2

Thanite	2.00%
Allethrin	0.10
DDT	2.00
Piperonyl butoxide	0.25
Deodorized kerosene	8.65
Methylated naphthalenes	7.00
Freon 11 & 12 (1:1)	80.00
	100.00%

TYPICAL FORMULA No. 3

Thanite	2.00%
Pyrethrins	0.10
DDT	2.00
Piperonyl butoxide	0.25
Deodorized kerosene	2.40
Methylated naphthalenes	8.25
Freon 11 & 12 (1:1)	85.00
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Crown 15 is characterized by its high terpene phenolic resin compatibility, and can be used in conjunction with high melting point resins in 50/50 proportions, or higher, *without the use of any carnauba wax*. Emulsions made with Crown 15 are translucent and dry to a hard, glossy, non-tacky film.

SPECIFICATIONS

Petrolite Wax	MP°F	Pen.	Color NPA	Acid No.	Sap. No.
15	180 min.	4-6	4-5	14-16	50-60
23	180 min.	4-6	4-5	20-25	55-65
36	180 min.	5-7	5-6	30-35	75-85

If you have an emulsion polish formulation problem, one of these Petrolite waxes may be the answer. Samples, prices and technical information are yours for the asking. Shipments can be made F.O.B. Jersey City, Chicago, Kilgore and Los Angeles.

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high quality
that has been
our standard
for over 40 years

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CREATORS AND COMPOUNDERS OF THE BEST IN CLEANERS AND DISINFECTANTS FOR OVER 44 YEARS

C. L. Weirich of C. B. Dolge Co., Westport, Conn., center, re-elected president of the Chemical Specialties Manufacturers Assn. with newly elected directors (left to right) Carlos Kampmeier, Rohm & Haas Co., Philadelphia; Daniel H. Terry, Bon Ami Co., New York; Frank Pollnow, Jr., Vestal, Inc., St. Louis and Malachy J. Flanagan, Federal Varnish Div., Enterprise Paint Co., Chicago.

C.S.M.A. Reelects Weirich

MAJOR developments taking place during the 39th annual meeting of the Chemical Specialties Manufacturers Assn., held Dec. 7-8-9, at the Hotel New Yorker, New York were:

1) registration for the meeting of over 750—largest for any previous meeting and close to the 1,000 hoped for at next December's 40th annual meeting in Washington, D. C.;

2) re-election of C.S.M.A. president C. L. Weirich of C. B. Dolge Co., Westport, Conn., and other officers for another term;

3) presentation of plaques to Anthony G. Grady of Sinclair Refining Co., East Chicago, Ind. and the late Dr. Charles H. Peet to commemorate the twentieth anniversary of the adoption of the Peet-Grady Method for testing liquid household insecticides;

4) awarding of plaques for outstanding aerosol packages in seven different groups as part of the first "Aerosol Festival";

5) a press conference to explain and demonstrate the aerosol loader's and marketer's side of the aerosol hair lacquer flammability controversy, which developed just prior to the convention;

6) announcement of the U. S. Department of Agriculture's new "EQ-53" moth-proofing product for use by householders;

7) a first-hand report on the Montan wax industry of Germany by Dr. Charles E. Marsel of N. Y. U., who returned from a flying inspection trip just before the meeting;

8) first full-length report of Monsanto's new bacteriostat ("Actamer") for soaps and other specialties;

9) an up-to-date report on the Federal Supply Service's new field performance tests on floor waxes;

10) a symposium discussion of the role of alkaline builders in soap and detergent formulations.

Other papers and discussions having a high degree of interest and which were given before packed meetings were: the 1952 aerosol dealer study of Kinetic Chemicals Division of du Pont; a panel on labeling and another on fogging devices for dispensing insecticides; three papers on the use of disinfectants and sanitizers in different types of applications and a paper on the removal of stains from plastic dinnerware.

Officers chosen to head C.S.M.A. for another year, in addition to Mr. Weirich, are: first vice-president, Melvin Fuld, Fuld Brothers, Inc., Baltimore; second vice-president, T. Carter Parkinson, McCormick &

Co., Baltimore; treasurer, Peter C. Reilly, Jr., Reilly Tar & Chemical Corp., Indianapolis; Herbert W. Hamilton, secretary.

New members of the board of governors are: Carlos Kampmeier of Rohm & Haas Co., Philadelphia; Malachy J. Flanagan, Federal Varnish Division, Enterprise Paint Co., Chicago, and Frank J. Pollnow, Jr., Vestal, Inc., St. Louis.

The only change among the chairmen of the administrative committees of the six divisions of which the association is composed is the replacement of Herbert L. Sanders as chairman of the Soaps, Detergents and Sanitary Chemicals Division by Dr. Daniel H. Terry of Bon Ami Co., New York. R. E. Puhle, Tykor Products Div., Borden Co., Brooklyn, becomes chairman of the Disinfectants and Sanitizers Division suceeding W. X. Clark of Sterwin Chemicals, Inc., New York.

At a special luncheon on Dec. 9, to commemorate the twentieth anniversary of the acceptance of the Peet-Grady method of testing household insecticides, James A. Green, Standard Oil Co. of Indiana, Chicago, chairman of the C.S.M.A. insecticide division, acted as toastmaster. He presented plaques to Anthony G. Grady, entomologist of Sinclair Refining Co., South Chicago, Ind., and to the widow of Dr. Charles A. Peet, who, at the time of his death, was assistant treasurer of Rohm & Haas Co., Philadelphia. Similar plaques went to N. J. Gothard of Sinclair Refining Co., Chicago, and to Carlos Kampmeier, who accepted the award on behalf of Rohm & Haas Co.

The results of the aerosol packaging contest, designated the "Aerosol Festival", were announced following the post-luncheon address on Dec. 8, of Paul S. Willis, president of the Grocery Manufacturers of America. The presentation of plaques was made to first award winners and honorable mentions in the contest judged by John Vassos, industrial designer; Lloyd Stouffer, editor of *Modern Packaging;* John Strauss of R. H. Macy & Co., and Alfred Auerbach, package designer.

In the insecticide classification no product submitted, in the opinion of the judges deserved first award. An honorable mention went to "Flit" aerosol insect spray marketed by Esso Standard Oil Co., New York, and filled by Continental Filling Co., Danville, Ill.

First award in the room deodorant category, for which there were the most entries, was awarded to "Pine Air" deodorizer of Claire Manufacturing Co., Chicago. Aeropak, Inc., Chicago, was the filler of "Pine Air". An honorable mention in this product class was awarded to Bridgeport Brass Co., Bridgeport, Conn., for its "Good-Aire" air refreshener.

No first award was presented in the moth proofer category, although "Mothban" of Standard Oil Co. of Indiana received an honorable mention for its moth killer, which was loaded by Continental Filling.

"Hero" fire extinguisher of Bostwick Laboratories, Bridgeport, Conn. won the first award in the miscellaneous household products class.

In the miscellaneous products category, "Auto Foam" upholstery cleaner, marketed by Plasti-Kote, Inc., Cleveland, received first award. Another first award winner was "Brasco" black plastic spray paint of Bridgeport Brass Co.

Besides a first award in the personal products class, which went to Colgate-Palmolive-Peet Co., Jersey City, N. J., for its "Rapid Shave", loaded by Regal Chemical Corp., Brooklyn, there were two honorable mentions. The first honorable mention was won by Lucien LeLong, Inc., Chicago, for "Abra Ca Dabra" perfume mist. The filler was Continental Filling Co. The second honorable mention was received by E. M. McNally, president of Barbasol Co., Indianapolis for his company's "Barbasol" lather type brushless shave cream. The filler was Continental Filling Co.

Answering newspaper reports and television showings of the danger of fires being started through the use of aerosol dispensed hair fixatives, John D. Conner, C.S.M.A. general counsel, at a special press conference held during the meeting, stated that the association had not learned of a single instance in which such a preparation has caused any type of injury or has been responsible for starting a fire in the three years these products have been marketed. In that time, he added, over eight million units of aerosol hair fixatives have been sold—enough for many times that number of applications. Mr. Conner also pointed out that manufacturers of such products conducted extensive research and testing before hair preparations were marketed.

He also criticized what he termed the "sensational aspects of spraying (hair fixative) products directly into an open flame." He pointed out that an open flame presents in itself a considerable hazard, and that many household products in common use if poured or sprayed into an open flame would burn.

In conclusion Mr. Conner pointed out that the CSMA "has been assured by manufacturers of aerosol hair fixatives that they will cooperate fully in calling to the attention of the consumer, through adequate labeling, the normal precautions which must be observed to assure that these products will be used for the purpose and in the manner in which they were intended."

To demonstrate a statement of Mr. Conner's that a lighted cigarette can be extinguished by spraying an aerosol hair fixative on it, Robert H. Ablanalp of Precision Valve Corp., Yonkers, N. Y., sprayed a well-known aerosol hair fixative on a cigarette held by Arthur H. Adler of Helene Curtis Industries, Inc., Chicago.

The development of a mothproofing product by entomologists of the Bureau of Entomology and Plant Quarantine of the U. S. Department of Agriculture was announced at the meeting. The new moth proofer, "EQ-53", developed and tested by Hamilton Laudani and associates at the Savannah, Ga., laboratory of U.S.D.A., is expected to be on store shelves by next spring. It is essentially a mixture of DDT and other chemical carriers. Housewives can mothproof blankets, sweaters and other washable woolens by pouring a few spoonfuls of

Head table at the luncheon Dec. 8, left to right, directors: Bayard S. Johnson, Franklin Research Co., Philadelphia; Donald M. King, Masury Young Co., Boston; J. M. Kimmel, Aeropak, Inc., Chicago; Dr. E. G. Klarmann, Lehn & Fink Products Corp., Bloomfield, N. J., director; W. X. Clark, Sterwin Chemicals, Inc., New York, director; James E. Ferris, Niagara Alkali Co., New York, director; Harry E. Peterson, Continental Filling Co., Danville, Ill., director; Melvin Fuld, Fuld Brothers, Inc., Baltimore, first vice-president; Leonard J. Oppenheimer, West Disinfecting Co., Long Island City, N. Y., director; M. M. Marcuse, West Disinfecting Co., one of the founders of the C.S.M.A.; Paul S. Willis, president, Grocery Manufacturers of America; C. L. Weirich, C.S.M.A. president and H. W. Hamilton, secretary.

the solution into the washing machine containing the woolens, according to the U.S.D.A. announcement. "EQ-53" also may be added to the woolens during or after rinsing. The treatment can be made in nearly all home washing machines—automatic, semi-automatic, or wringer type. The moth proofer can also be used in a wash basin or tub. The Bureau of Entomology & Plant Quarantine is asking the interested manufacturers seeking additional information write to the Bureau, c/o the U.S.D.A. at Washington 25, D. C. An intensive educational program is to begin April 18, using women's magazines, radio, television and newspapers.

"EQ-53" is an emulsifiable concentrate of DDT, with the proper selection of emulsifier and solvent. A DDT emulsion is formed when a small amount of the concentrate is added to the wash water. There is a selective pick-up of DDT from the emulsion by the wool and the deposit of DDT in the wool is much greater than would be anticipated on the basis of theoretical calculations. This has been proved by experimental tests and a technical paper will soon be published giving the experimental data.

The new moth proofing compound contains the following ingredients:

per cent	
30	DDT
10	Non-ionic emulsifier of the polyhydric alcohol, or alcohol ether type.
60	Aromatic hydrocarbon solvent with indicated specifications.

The most satisfactory solvent found in the developmental research, according to the U.S.D.A. was "Solvesso 100". Other solvents that comply with the specifications given will undoubtedly be suitable. The emulsifier used was "Triton X-100, but any non-ionic emulsifier of the polyhydric alcohol or alcohol ether type may perform satisfactorily. The kind of emulsifier and solvent used in "EQ-53" have been picked carefully to insure 1) the proper functioning of the selective pick up of DDT from the emulsion by the wool, 2) the highest possible safety to the user, and 3) lack of injury to the woolens being treated.

The BE&PQ has made preliminary arrangements with the Insecticide Division of the Production and Marketing Administration with regard to the labeling of "EQ-53" products, which will come under the jurisdiction of Federal and State laws governing the sale of insecticides. Any preparation sold as "EQ-53" must comply with the specifications listed. An example of the type of label that will be acceptable to PMA may be obtained from the U.S.D.A. It includes brand name, listing of active ingredient by percent and inert ingredients and percent; precaution statement, directions for use; net contents and name and address of manufacturer.

A report on the progress of the Federal Supply Service in developing field performance tests for floor waxes, was given at the afternoon session, Dec. 9, of the Waxes & Floor Finishes Division by J. B. Snider, Chief, Chemicals, Drugs and Agricultural Products, Specifications Branch, Standards Division, F.S.S., General Services Administration, Washington, D. C. He pointed out that as a result of complaints by user agencies regarding poor quality, high maintenance costs, and high accident rates with waxes purchased by the F.S.S., a test program had been set up in five cities: New York, Chicago, Denver, San Francisco and Philadelphia. A standard form for establishing wearability, slip resistance, durability, and other properties of floor waxes bought by the F.S.S. has been used in checking wax quality and performance. As a result of this test work the Federal Supply Service is expected shortly to issue specifications for wax purchased by the agency. A list of qualified products will be set up and manufacturers of these products will be invited to bid on the waxes. In addition, Mr. Snider stated standard samples of a water emulsion type floor wax containing 16 percent solids will be distributed which manufacturers bidding on must equal or better.

The morning session, Dec. 8, of the disinfectant and sanitizers division opened with a paper on biological and chemical properties of 2,2-thiobis (4,6-dichlorophenol), "Actamer", a new bacteriostatic compound. The paper, presented by R. S. Shumard of Monsanto Chemical Co., St. Louis, begins on page 34 of this issue.

At the same session Eugene J. Gerberg, director, Insect Control & Research Inc., Baltimore, spoke on food plant sanitation. He pointed out that any sanitation program must consist of limitation of the pest population potential by limitation of its food and harborage, and by killing pests through chemical means, trapping and physical measures. Meticulous cleanliness, involving the use of detergents and cleaning agents, achieves limitation of the food supply. Harborage is reduced by such measures as pestproofing of buildings, etc. Trapping should,

Gordon M. Baird, Baird & McGuire, Inc., Holbrook, Mass., executive committee member; T. Carter Parkinson, McCormick & Co., Baltimore, second vice-president; A. E. Moore, R. M. Hollingshead Corp., Camden, N. J.; A. G. Peck, Peck's Products Co., St. Louis; Charles W. Furst, Furst-McNess Co., Freeport, Ill., board members; Lloyd Stouffer, editor Modern Packaging; E. G. Young, Kinetic Chemicals Division, E. I. du Pont de Nemours & Co., Wilmington, board member; H. R. Shepherd, Connecticut Chemical Research Corp., Bridgeport, Conn., executive committee; H. L. Sanders, Ninol Laboratories, Inc., Chicago, board member.

as far as possible, be confined to the outside of the premises. The speaker mentioned special safety problems inherent in the use of chemical insecticides and rodenticides in close proximity to food. Control of pests by physical means includes heat, steam and ultraviolet radiation.

The same group heard a paper by Richard E. Day, district sanitarian, Armour & Co., New York, on sanitation in the meat packing industry. Mr. Day said that the quaternary ammonium compounds have so far not found wide acceptance by packers because their application had proved itself costly in time and money, and resulted in a comparatively slight reduction in the population of microorganisms. He called upon the chemical specialties industry to evolve such compounds, more adapted to the use in meat packing establishments. The speaker underlined problems created by mold growth in the meat packing industry, and mentioned the importance of the hypochlorites in combating them. He stressed the extreme importance of fungicidal protective coatings, such as copper-8-quinolinate paints.

Among the unsolved problems of the meat plant sanitarian, which would have to be solved by the chemical specialties industry, he said, is the need for new, cheap, and effective alkaline detergents, and especially for safe rust-preventives, which satisfy most rigorous demands for non-toxicity and effectiveness. Detergents, sanitizers, insecticides, rodenticides, and fungicides have made the attainment of a high sanitation level easier and economically more realistic. Their use has greatly lightened the task of the meat plant sanitarian. Dr. Alvin R. Jacobson, associate professor, Sanitary Science, Columbia University School of Public Health, New York, spoke on disinfectants and germicides, antiseptics and sanitizers—their role in public health. After considering the physical agents in this field the speaker described in detail limitations and range of effective application of chemical agents, grouping them into acids, alkalis, metals, halogens, oxydizing agents, alcohols, phenol and coal-tar products, formaldehyde, soaps, quaternaries, and sulfa drugs. Apart from the conventional role of soap as a cleanser Dr. Jacobson referred to the introduction of germicidal soaps.

The part the quartermaster general testing laboratories play in procurement of disinfectants was the subject of a paper presented by Edward F. Williams, chief chemist, Philadelphia Quatermaster Depot, U. S. Army, Philadelphia. Among the major items purchased he mentioned calcium hypochlorite, halozone tablets, ion tablets, and disinfectant chlorine food service. He briefly described the set up of the new testing laboratories, testing procedures, and the special packaging and other problems inherent in military buying.

The afternoon session, Dec. 9, of the disinfectant and sanitizers division heard George R. Goetchius, Rohm & Haas Co., Philadelphia, on the development of a detergent-sanitizer for washing eggs. Approximately 80 percent of the eggs reaching metropolitan markets in the East have undergone a washing process. Until recently spoilage among washed eggs has been high, mostly due to infection by *Pseudomonas fluorescens*. Clean unwashed eggs used to be considered the best keepers, but the 12 to 15 percent of soiled eggs represents a heavy economic loss to the producer. According to the speaker, a detergent-sanitizer has been developed by Rohm & Haas which

Below, l. to r.: James A. Green, Standard Oil Co. of Indiana, Chicago, toastmaster for the special program commemorating the 20th anniversary of the Peet-Grady method of testing household insecticides, presents scrolls to Carlos Kampmeier, Rohm & Haas Co., where Dr. Peet carried on his work on the method. Next picture is of Mr. Green and Mrs. Peet, widow of Dr. Peet. Subsequent pictures are of Mr. Green holding plaque with N. J. Gothard of Sinclair Refining Co., Chicago, who received the award on behalf of his company, and A. G. Grady and Mr. Green. Mr. Grady was the co-inventor of the method.

answers the special problems of the industry. This formulation looses its cleaning action before its germicidal activity is exhausted, thus safeguarding against the continued use of washing solution after it is already heavily contaminated. Dr. Goetchius supported claims for the new egg washing formulation by results of comparative laboratory tests similar to those run for dairy sanitizers. They showed quaternaries alone, various alkalies, and other tested compounds to be good cleaners but resulting in high spoilage.

S. S. Block, associate professor, college of engineering, University of Florida, Gainesville, presented a paper on the fundamentals of mildew prevention. According to Dr. Block, mildew ranks second only to insects as a pest control problem in the South. He touched briefly upon the biology of mildew, and upon its control by application of moisture-reducing heat in confined spaces, such as closets, by certain constructional arrangements providing ventilation, and by chemical means. He described various laboratory testing methods, and some practical type tests. He stressed the extreme importance of mildew proofing paints and preservatives to be applied to materials and leather. He described the heavy fungus damage common in the South to mattresses, upholstery, and hangings, and mentioned the mold stains disfiguring stone structures. He called upon the chemical specialties industry to develop low price mildew preventives for textiles, especially upholstery, and leather and mildew preventive paints for use by the Southern home owner.

The insecticide division meetings were highlighted by a pair of symposia—one concerned with fog machines for dispensing insecticides and the other on labeling.

The discussion on fogging opened with a description of insecticidal aerosol generators by A. H. Yoemans, U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine, Beltsville, Md. Mr. Yoemans stated that the machine must be designed to handle various formulations and be able to produce the proper particle size. Mr. Yoemans discussed the various types of aerosol generators which included the hot air atomizer type which produce an aerosol of smoke size or larger; the pulse jet aerosol which uses the explosion exhaust from a pulse jet engine; the steam type which uses steam to atomize liquid into an aerosol; the spinning disk type of aerosol generator where the insecticide is thrown out from between disks held together at the outside edge; the high liquid pressure method to atomize liquids and slow burning chemical compositions—all of which are used to produce aerosol fogs.

The next speaker, W. B. Stevens of Socony-Vacuum Oil Co., New York, spoke on the formulations used for aerosol generators. He discussed the higher concentrations of specific insecticides and the oil carriers with higher solvent power than ordinary fuel oil or kerosene. High solvent power is obtained in fog oils by high aromatic content. DDT is soluble in kerosene, #2 fuel oil and insecticide base oils to about 4-8% at 68°F which is not enough for effective fogging operations. Indoor fog oils should be capable of dissolving with moderate agitation +5—25% DDT at working temperatures of 60° to 70°F and retaining this amount in solution at 32°F. In outdoor fogging operations, particle size distribution is very important. A highly aromatic oil is somewhat better than #2 fuel oil for particle size control. The influence of particle size control on the persistence of fog is illustrated by comparison of the effective swath of fogs generated by airplane exhaust. The effectiveness was measured by determining the percentage of kill of caged flies at varying distances from the center of the airplane's course. Another factor is the high knockdown properties of aromatic fog oil compared with pyrethrum extract. This high knockdown power of aromatic oils, without the need of pyrethrum, is hardly realized by pest control operators.

Dr. J. V. Osmun, department of entomology, Purdue University, discussed the scope of uses of the various insecticidal generators stating that "as the wind goes, so goes the fog".

Mr. Osmun mentioned that too much emphasis was placed on fogging for fly control. Grass, branches, trees and bushes deflect the fog and do not get to the insects on the other side. He mentioned that vertical surfaces received no deposits of insecticide because of air circulation. There are no deposits beyond twenty feet from the generator. The machine is effective against flying insects that are in the air, but adult flies in grass or on trees are not affected because of the dispersion of the fog by obstacles.

Dr. E. J. Hansens, Department of Entomology, Rutgers University, New Brunswick, N. J., reviewed the use of fogging machines in New Jersey. He mentioned that, in general, fog machines have been unsatisfactory for housefly control. Indoors, there is only temporary relief because these devices will not lay down residual deposits of insecticides. Out-of-doors fog generators have been unsuccessful on houseflies because conditions are unsatisfactory for fogging in the daytime. Fog machines have been found to be no cure-all for mosquito problems in New Jersey.

F. K. Harder, Harder Exterminating Co., Hempstead, N. Y., discussed the problems of the operator of fogging machines. He mentioned the fact that governors were being installed on jeeps to keep down their speed. He also stated that because of the large number of fogging jobs an operator is required to handle it is impossible to follow rules laid down by experiment stations. Machines must be on the move all day to cover the required territory to keep on schedule. Fogging at night is out of the question because of the noise of the machines, he said.

The symposium, "How Various People Look at Labeling" opened with a review of the various laws by S. C. Billings, U. S. Department of Agriculture. He mentioned the federal law and briefly reviewed what is necessary for compliance.

E. W. Constable, state chemist, Department of Agriculture, Raleigh, N. C. discussed the state laws and how they attempt to follow fed-

(*Turn to Page* 137)

Top: Manning O'Connor, Colgate-Palmolive-Peet Co., Jersey City, N. J., holding plaque awarded for "Rapid Shave"; H. R. Shepherd, Connecticut Chemical Research Corp., Bridgeport, with plaque for "Hero" fire extinguisher of Bostwick; Miss Aerosol; M. J. Kimmel, Aeropak, Inc., Chicago filler, holding plaque for "Pine Air" deodorant of Claire Mfg. Co., Chicago; W. H. DiSesa, Bridgeport Brass Co., with plaque for "Brasco" paint spray and Herbert D. Fine of Plasti-Kote, Inc., Cleveland, marketer and filler of "Auto-Foam."
Center photo: First award aerosol winners in first row, honorable mentions second row. Bottom: Judges for aerosol packaging contest, l. to r.: Alfred Auerbach, John Vassos, Lloyd Stouffer and John Strauss.

Montan Wax...

BECAUSE of the high price of carnauba wax, increased attention is being given to lower priced wax products which can used satisfactorily as replacements, such as the modified montan waxes.

Montan wax is a bituminous wax, occurring in woody coals or lignites, from which it can readily be extracted. Wax-containing coals have been mined in such countries as Australia, New Zealand, Czechoslovakia, Russia and the United States (California, Arkansas), in addition to the main source of supply in Central Germany, where its extraction and processing is an old and established industry. The crude wax is complex chemically, but its constitution is similar to other natural waxes. It has been estimated to contain about 55-60 per cent of esters of wax acids, 15-20 per cent of free wax acids and up to five per cent of free alcohols (1). Depending on the geographical occurrence, the resin content of the wax varies. For example, the German deposits are noted for their relatively lower resin content, thus producing a satisfactory product more economically.

The coal is granulated, dried, and solvent extracted to remove the wax. The crude wax is usually further processed to produce an acceptable market product. One type of refining is by vacum distillation using steam producing the so-called "double-refined" montan wax. In a second and more important refining process, the wax may be deresinified by solvent processing, and then treated by chromic acid oxidation. The latter product may then be esterified with aliphatic glycols, or otherwise treated, to give a variety of highly useful and versatile waxes.* Such chemical processing offers the advantage of a series of tailor-made wax products with quite uniform properties.

The brown coal from Germany has an average wax content of 10-15 percent, although some samples may run as high as 18 percent. After granulation and drying to a moisture content of about 10 percent, the wax is extracted from the coal with a solvent mixture of benzene and methanol. After solvent removal, the crude wax contains about 15-20 percent of resin, which is largely removed by a second extraction with a solvent such as ethanol. (See Figure 1).

Alternately, the wax may be vacuum distilled at 50 mm. pressure in which case the higher boiling distillate is a useful wax product. Yields are not too good in this process however.

At this point, the refining process usually used in Germany is the one developed by I. G. Farben, based on oxidation of the deresinified wax with chromic acid, which gives the highest yields of wax product and produces a harder material. It was developed during the 1920's in the Ludwigshafen —Oppau Works of I. G. and later transferred to Gersthofen, where it was expanded considerably, due to the availability at Gersthofen of electricity used in the chromic acid regeneration step.

The oxidation of the deresinified wax is done with chromic acid in strong sulfuric acid solution. After completion of reaction, the waste liquors are removed and the wax washed free of chromium salts and acid. Water is removed by vacuum heating. This product is called Wax "S" and may be sold as such, or used to prepare further derivatives (2).

In the polish industry, waxes KPS, O, OP, E and F are of importance, the KPS being of most interest to the self-polishing floor wax manufacturers. Gersthofen Wax KPS is prepared by oxidizing a mixture of deresinified and underesinified montan wax, and glycol esterification of the resulting product. Figure 2 illustrates this operation.

Study U. S. Montan Output

SOME time back, the Bureau of Mines investigated the possibilities of domestic production of montan. Using a solvent extraction process, it found that yields from California and Arkansas lignite were comparable to those from German coal, but the resin content of the wax was higher.

Domestic montan got its first big commercial push during World War II when American Dyewood Co., New York, producing sodium humate

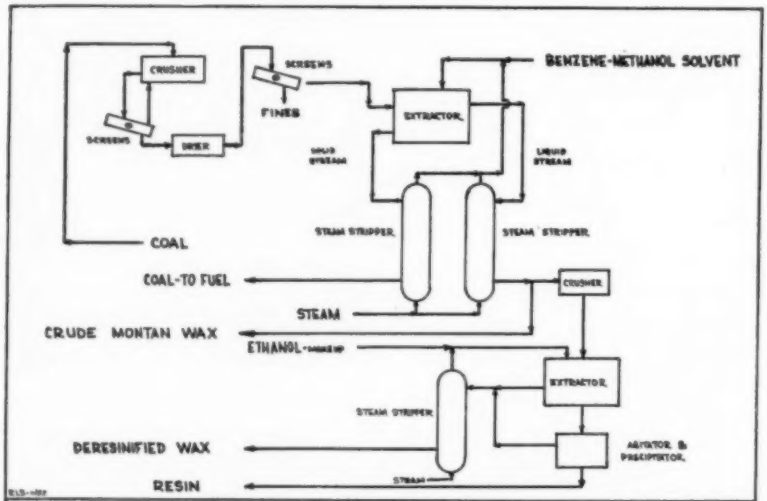

FIGURE-1 MONTAN WAX FROM COAL
EXTRACTION AND DERESINIFICATION

* For a comprehensive and modern review of this industry in Germany, see: G. v. Rosenberg, "Montan Wax Derivatives from Lignite Coal and Their Properties and Uses," *Bitumen— Teere — Asphalte — Peche und Verwante Stoffe*, No. 7, 1952.

Its Place and That of Its Derivatives in the Floor Wax Industry

By Dr. Charles J. Marsel*
Chemical Engineering Dept., New York Univ.

from a lignite deposit near Malvern, Ark., extracted montan wax as a by-product. However, American Dyewood also found the resin content of the wax too high for commercial acceptance, and the plant closed down when the market for sodium humate tapered off (3). With this market closed, the wax produced could not compete with the German montan in quality and in price.

Raymond Drew, American Dyewood research director, believed that a suitable montan could be produced domestically, and in 1947 he left American Dyewood to join American Lignite Products Company (a De Angelis Coal subsidiary) in exploiting the California deposits, which are the largest suitable deposits in this country. Early last year, Mr. Drew left American Lignite to join Humacid Company, which also was set up to produce humic acids and montan wax from the California deposits. A new extraction process was worked out to control the resin content of the wax and to produce humic acids as a quebracho replacement in drilling muds.

* Paper presented at 39th annual C.S.M.A. meeting, New York, Dec. 8, 1952.

Some technical details of Humacid's process have been revealed (3). Wax content of the coal is about 10 percent, or somewhat lower than the German deposits. The coal is mined, ground to 20 mesh, classified and stored. It is then sent to a ball mill where it is mixed with metered amounts of solvent and ground to 200 mesh, which gives proper extraction. The extraction is carried out at 75°C, with a highly aromatic (about 50 percent unsaturated) solvent. After filtration, the wax-free lignite is sent to a caustic tank for humic acid production. The primary selvent is then recovered from the wax fraction and a second extraction carried out with a light naphtha cut virtually free of aromatics. This second extraction provides preferential solubility for different types of waxes, and different concentrations of asphalts and resins.

Production at this plant never reached more than 15 tons per month, apparently due to engineering difficulties. The plant at present has ceased operations, said to be due in part to the poor quality of their lignite deposits.

American Lignite seems to be in a somewhat better position, since it is said the humic acids produced from its deposits are more suitable for use in oil well drilling muds. They are at present only producing a special montan, which is a good quality montan wax obtained through a selective solvent extraction process, which removes most of the resin and pitch.

It may be of interest to consider briefly the possible United States markets for montan wax derivatives. Table I shows the estimated U. S. wax consumption for 1951, by end use (4).

The variety of derivatives made from German montan, formerly called I.G. waxes, are now named Gersthofen waxes, and are produced by the German firm of Lech-Chemie (5). Estimated 1951 U. S. consumption of the Gersthofen waxes is also shown in Table I.

As can be seen, the main uses for Gersthofen waxes at present are in the polish field (floor, auto, furniture and shoe), leather coatings, and carbon paper.

In the polish industry, Gersthofen waxes, O, OP, E and F are most

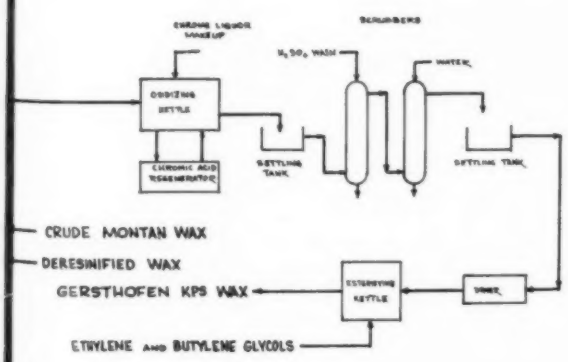

FIGURE-2 GERSTHOFEN KPS WAX
OXIDATION AND ESTERIFICATION

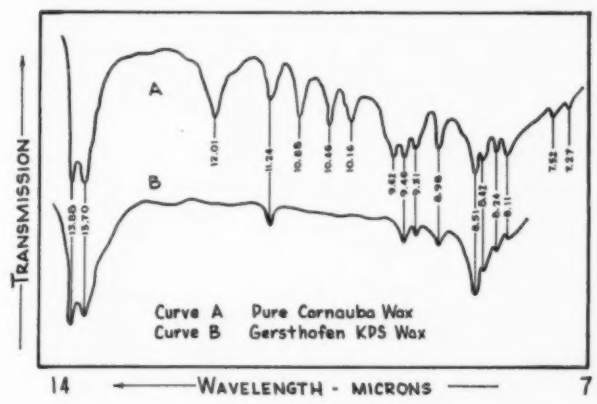

FIGURE 3
COMPARISON OF INFRA-RED SPECTRA
CARNAUBA & GERSTHOFEN KPS WAXES

TABLE I. Estimated U. S. Wax Consumption, by End Use, for 1951, in Millions of Pounds

End Use	CONSUMPTION* Gersthofen Waxes	Total
Paper: milk containers, food wraps, etc.	—	762.7
Candles	—	54.0
Electrical	—	29.0
Polishes: floor, auto, furniture, shoe	.6	34.1
Chlorinated paraffin	—	23.0
Textiles	—	18.1
Leather	.1	12.0
Protective coating and inks	—	.7
Fruit and vegetable coatings	..	11.1
Carbon paper	.2	6.4
Cosmetic, pharmaceutical	—	5.9
Greases	—	4.5
Lubricants: molds and other	—	.8
Rubber and/or resins	—	.6
Plasticizer for rubber and pts.	—	1.0
Chewing gum	—	.6
Additives to other waxes	—	.6
Other	.1	10.0
Imported	1.0	38.8
U. S. production	—	1,376.1
Less: exported	—	378.3
Inventory increase	—	61.3
Total used — U. S.	1.0	975.1

* Only includes uses which at present consume 50 tons/month or more.

useful for solvent-based paste and liquid floor polishes. The outstanding wax for water emulsion type floor polishes, however, is the Gersthofen wax KPS. This product is quite similar chemically to carnauba wax, as shown by the infra-red spectrum (8) of the two substances (see Figure 3).

The properties of KPS wax compared with carnauba wax are shown in Table II. Physical and chemical properties of KPS wax are so similar to carnauba that in testing the two waxes, using infra-red spectroscopy, refractive index, and other common quantative identification tests (7), it is in most cases extremely difficult to differentiate between them. Therefore, wax KPS may usually be formulated and emulsified in the same way as carnauba, or in conjunction with carnauba.

An additional point is that there is some variation in individual lots of carnauba wax, because of its origin and method of processing. This shows up, for example, in the fact that certain lots of carnauba may give trouble in emulsion preparation, and the formula might have to be adjusted to allow for this variation. Because of the carefully controlled production methods, and the rigid specifications which each batch must meet, the properties of the Gersthofen wax fall within a narrow range and are quite uniform.

Formulations have been evolved for the use of KPS wax alone and in conjunction with carnauba wax in self-polishing formulas. Two basic emulsion formulas, one using an ionic emulsifier, the other a non-ionic emulsifier, are shown in Table III. Two additional recommended formulas which incorporate additives such as resin and oxidized microcrystalline wax, are shown in Table IV. These emulsions are prepared as follows:

Ionic Emulsifiers

OLEIC acid and wax are melted at a temperature of about 95-102°C. The triethanol amine is mixed with eight parts of hot water (60-70°C), and this solution is added slowly with agitation to the melted wax. Then 35 parts of boiling water are added with vigorous agitation to the mass. The remainder of the water (40.9 parts) is added cold with continued stirring to the solution, which is then cooled to room temperature. Naturally other amines can be used as desired in place of ethanol amine.

TABLE II. Comparison of the Properties of Gersthofen KPS Wax and Carnauba Wax (6, 7)

Property	Gersthofen KPS Wax	Carnauba Wax*
Melting Point	80-83°C	83-86°C
Acid No.	20-30	2.8-5.4
Saponification No.	130-145	73-84
Flash Point	520-550°F	520-605°F
Sp. Gravity at 20°C.	1.02-1.03	0.999
Refractive Index at 100°C.	1.4421	1.4457-1.4478
Structure	Hard, Crystalline	Hard, Crystalline
Color	Light Yellow	Light Yellow—Bownish Black
Oil Absorption	Good	Good
Gloss	Excellent	Excellent
Emulsification	Very Good	Very Good

* Average Properties

TABLE III. Basic Emulsion Formulas for Gersthofen KPS Wax

1. Ionic Emulsifier

	% by Weight
KPS Wax	13.0
Oleic Acid	1.5
Triethanol Amine	1.6
Water	8.0
	35.0
	40.9
	100.0

2. Non-Ionic Emulsifier

	% by Weight
KPS Wax	10.0
Atlas Emulsifier G-3920	1.2
Water	5.0
	35.0
	48.8
	100.0

Non-Ionic Emulsifiers

THE wax is melted, at a temperature of 95-102°C, the emulsifier added, and the mixture stirred to give a homogeneous mass. With continued stirring, five parts of boiling water are added. Moderate foaming occurs. As soon as foaming decreases, and the solution is homogeneous, thirty-five parts of water is brought to a boil, and added quickly with vigorous stirring. The temperature of the solution should be about 95-100°C before this water addition, to prevent excessive foaming.

The remainder of the water (48.8 parts) is added cold with continued stirring to the solution, which is then cooled to room temperature.

The above are merely suggested

TABLE IV. Emulsion Formulas with Gersthofen KPS Wax

3. Ionic Emulsifier

	% by Weight
KPS Wax	8.0
Durez 219	4.0
Crown 700	1.0
Crown 23	1.0
Oleic Acid	0.8
Atlas G-9446/N	0.2
25% Ammonia	2.0
Borax	0.3
Water	10.0
	45.
	27.7
	100.0

Shellac may be added as desired.

4. Non-Ionic Emulsifier

	% by Weight
KPS Wax	6.5
Durez 219	3.8
Crown 700	1.7
Atlas Emulsifier G-3920	1.9
Water	5.0
	45.0
	36.0
	100.0

Shellac may be added as desired.

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as basic formulas and may be modified as desired. For example, shellac solution may be added to the formulas as follows:

To 100 parts of emulsion, one may add 20 parts of shellac solution. The shellac solution may consist of:

20 parts shellac
3.4 parts borax
76.6 parts water

The cold emulsion is added to the cooled shellac solution.

When a high melting point resin like "Durez"* is to be used, it is necessary to prepare the mixture of KPS wax and resin first, in a one-to-one ratio, as follows. The KPS wax is melted at a temperature of 90-100°C, and then heated as quickly as possible to a temperature 10°C above the melting point of the resin. At this point the powdered resin is added with stirring, and the stirring continued until the mass is homogeneous. The temperature should still be kept above the melting point of the resin during this addition. At this point two procedures are possible. One is to cast the mixture in solid form, and use it in the prescribed formula as one does the wax itself. The other is to cool the mass down to a temperature of approximately 100°C, and then proceed as described in the basic formula.

The above procedure of adding water to wax melt is the common one, but it is also possible to reverse the process and add the wax melt to the full amount of water, if desired.

As mentioned earlier, Gersthofen waxes are very useful for paste floor waxes, and solvent-based liquid floor polishes. The Gersthofen waxes so used are O, OP, E and F. The following formulations as shown in Table V are suggested as basic formulas. These formulations are prepared as follows:

Paste Floor Wax Polish

THE Gersthofen waxes OP and E are melted together at a temperature of about 110°C. Then the microcrystalline wax and paraffin wax are added with gentle stirring until the mass is homogeneous. While this is being done, the temperature can be allowed to drop to about 90°C. After the mixture is well homogenized, the solvent is added with continued stirring. Care must be taken that the solvent addition be performed in such a way as to prevent local precipitation of wax from solvent. Pouring temperature is 45°C. Excellent automobile polishes can be made in a similar way using Gersthofen waxes.

* Durez Plastics & Chemicals, Inc., N. Tonawanda, N. Y.

TABLE V. Paste Floor Wax and Solvent-Based Liquid Floor Wax Polishes with Gersthofen Waxes

Paste Floor Wax Polish	% By Weight
Wax OP	9.0
Wax E	1.0
Microcrystalline Wax[1]	1.0
Fully Refined Paraffin Wax[2]	9.0
Mineral Spirits[3]	80.0
(Turpentine added as desired)	—
	100.00

Solvent-Based Liquid Floor Wax Polish	
Wax OP	1.0
Wax E	3.5
Microcrystalline Wax[1]	0.5
Fully Refined Paraffin Wax[2]	5.0
Mineral Spirits[3]	90.0
(Turpentine added as desired)	—
	100.00

[1] Melting point about 70°C, penetration value 20 (measured at 25°C, 100 gr. weight, 5 seconds).
[2] Melting point about 52-54°C.
[3] Boiling point range about 140-200°C.

Solvent-Based Liquid Floor Wax Polish

PROCEED as described above for paste polish until after the addition of the solvent. At this point the temperature should not be below 60°C. Then the solution should be cooled with very vigorous agitation to room temperature.

It might be mentioned that in Europe, the Gersthofen waxes for some years have been the basis of many fine polish formulations, and are indeed the most widely used waxes in the polish industry there.

Conclusion

THE montan wax industry in the United States and Germany has been reviewed. The manufacture of derivatives of montan wax has reached a high level in Germany, with the production of a variety of highly useful and versatile waxes with quite uniform properties. Of these products, Gersthofen wax KPS is of primary interest to the manufacturers of emulsion floor polishes, and waxes O, OP, E and F for the solvent-based paste and liquid polish industry. Application research has produced emulsification formulas for KPS wax which indicated that it can be a valuable replacement for carnauba wax in floor polish formulations. Because of the low resin content of German wax, and other favorable economic aspects of the German location, it does not appear that domestic montan wax derivatives can be produced at this time which can compete with the Gersthofen waxes.

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Canco Advances Vaughn

William E. Vaughn has been named assistant to the vice-president in charge of sales for American Can Co., New York, it was announced recently by T. E. Alwyn, sales vice-president. Mr. Vaughn joined Canco's Maywood, Ill., research department after his graduation in chemical engineering in 1926. He was in charge of the laboratory's research work on products packed by customers when he transferred to the sales department in 1935. He headed the company's sales offices at Indianapolis until 1942. After his return from government service in 1945 he was transferred to the general sales office in New York, and became assistant to the general manager of sales in May 1951.

..That new product

How and by whom a new development chemical product should be introduced

By J. V. Miller*
Atlas Powder Company

INTRODUCING a newly developed chemical product to industry is a job which defies complete standardization. Nevertheless, certain situations do tend to repeat themselves until they form a sort of pattern which the sales executive can recognize and upon which he can base his actions. There are certain ingredients in every successful sale, but none of these ingredients is by any means a panacea. No one sales ingredient can apply everywhere, but must be selected and modified to suit the individual sales situation.

In the introduction of any new development chemical product, it is of course assumed that there is a market for the product whether that market be to supplant some other product or for entirely new and novel uses. It is also assumed that the salesmen undertaking to introduce a development product know where to make calls and where not to waste time on needless calls.

With these provisos, it is to be noted that the purchasing agent is the man to be visited first, and last as well. The purchasing agent is the key man. He becomes in effect the salesman's personal traffic manager. He tells the salesman who else in the plant is to be seen if the order is to be received and made to stick. Recently, as an example, an Atlas salesman called on a large aircraft manufacturing company, where as the sale progressed, the salesman was required to see and sell no fewer than forty-seven persons in a score of different departments. Ultimately, however, the purchasing agent's guidance succeeded in reducing that number to five men in three departments.

During all this time, the purchasing agent was being anything but idle. If the product itself seemed to have merit for his company he had to know a lot more about it to protect his own interests. He looked into every phase of the material and its maker to determine beyond any question of doubt the likelihood of regular supplies, dependability of the supplier, and a half-dozen other factors which would guide his procurement of the product in case it proved acceptable to his technical colleagues.

In no two companies will a salesman introducing a new product face identical situations. But, there is one thing which appears quite certain and that is the salesman who fails to get the purchasing agent on his side in the beginning is very likely to work his head off without too much in the way of useful results for his employers. It is after he has seen the purchasing agent that the real selling job begins.

Chemist Salesman's Target

THERE a new product is a development chemical being sold to a firm manufacturing other chemical products or specialties, the next real selling job is with the chemist. This is likely to contain an element of convincing the prospect's chemist that the salesman is backed up by an organization which can and will deliver consistent quality, which can guarantee purity of raw materials, and which can guarantee supplying helpful cooperative research. In other words, even in his work with the buyer's chemist, the salesman has to sell his company to an equal degree with the product. The chemist must be convinced that if the product is right to start with, the supplier is the type of company which will keep the product supply and quality right in the future, thus minimizing the chemist's raw material difficulties.

To this same chemist, the salesman must contribute some imaginative idea which the chemist may use. Inasmuch as the chemist knows the product which he already is using and knows that his production processes are geared to it, he naturally will be reluctant to upset his present system. This is probably the greatest resistance to the sale of new things, the unwillingness to change from something known to be satisfactory to something new and as yet fully untried. So, no matter how good the new chemical may be, the road is blocked unless the salesman furnishes the spark, the visionary idea which shows that the new material has or may have advantages which will increase demand and sales for the chemist's own finished products. It is this visionary idea which is the real key to a successful sales development job.

There seems to be no simplified or standardized approach to this part of the sales job, but it has to be done or there will be no sale. Somehow, the chemist's sights must be raised, perhaps by appealing to him with some end characteristic which he interprets readily in terms of mass acceptance. In the case of a detergent, for example, he might react favorably to the idea of a product which does not cause sneezing, or which leaves the skin softer. Another approach is to point out the stability of supply of the new material in a world vexed by shortages. If, by chance, the chemist is having trouble with his finished product, this may be the wedge to open the door for a new chemical.

In prosperous times, it is infinitely more difficult to introduce a new product. But the salesman does have in his favor one very potent assurance, that no chemist can afford to ignore his story, because competition has a way of stealing a march on

*Address before the 39th Annual Meeting, CSMA, New York, Dec. 8, 1952.

over-confident chemists. After the chemist has been persuaded to test out the product, the time comes usually to get the sales story across to sales managers and other plant and marketing executives. Their job will be to keep pressure on the chemist to be certain that the new chemical gets a thorough testing and no bets are missed.

Once the salesman has made the rounds, seeing everybody who may be a significant factor in the sale, he then retraces his steps to the purchasing agent and goes back to discussing the service angles and the ability of his company to supply the material without interruption when needed. It's here that the salesman has to sell himself and his personal service to the new customer, convincing the purchasing agent that he will be looked after when and if things become tough. It is here that credit relations, if there be any problems in this respect, must be discussed and settled, as well as numerous other details having no direct bearing on the product being sold.

For this latter portion of the sales job, the salesman must rely heavily on the reputation and prestige of his firm, these usually the results of all combined sales promotional efforts —space advertising, direct mail work, technical articles authored by its experts, participation in industrial exhibits, and so on. In this connection, sight should not be lost of valuable low-cost market research via the printing press. By advertising and supplying suitable editors with sound, helpful articles and data, new markets may be explored and uncovered whose existence may previously not have been suspected.

Sales Manager's Role

WHAT is the sales manager's responsibility in a new product development program? Briefly, his greatest contribution is to come up with the ideas which keep his salesmen constantly equipped with arguments and advantages. He must know his product and its possibilities. He must be able and willing to analyze the problems met by individual sales-

(*Turn to Page* 137)

Insecticide Names

Adopted common names for certain complex organic insecticidal and fungicidal chemicals . . . approved for labels under Federal Insecticide, Fungicide and Rodenticide Act . . . list compiled by

Dr. C. C. McDonnell

DURING the past few years much research has been conducted in connection with the development of insecticides and fungicides, and many new organic chemicals have been prepared and tested and found to be highly effective for these uses. A number of these compounds are of complex chemical structure and their chemical names are meaningless to the layman.

In order to simplify this problem, and for the sake of uniformity, the Committee on Insecticide Terminology of the American Association of Economic Entomologists has compiled a list of names and symbols (1) for use in the Journal of Economic Entomology and in manuscripts and releases from the Bureau. These names may also be used on labels of products subject to the Federal Insecticide, Fungicide and Rodenticide Act.

The terms designated by two asterisks are approved common names and those designated by one asterisk are trade names. Others are interim designations that may be used until approved names have been established.

In this list, the adopted common name or symbol is followed by the chemical name of the compound, and under the words "ACTIVE INGREDIENT" is the name accepted by the Insecticide Division of the Department of Agriculture for use in the ingredient statement on the label to comply with the Federal Act. Other designations for these compounds that have been used in the trade, are indicated in parentheses following the chemical name.

(1) Haller, H. L., Bureau of Entomology and Plant Quarantine release January 10, 1952. Rohwer, S. A., Bureau of Entomology and Plant Quarantine release October 3, 1949. U.S. D.A. Yearbook, 1952, pg. 748. Interdepartmental Committee on Pest Control release, September 25, 1952.

Insecticides

ALDRIN** . . . not less than 95 per cent of 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-dimethano-naphthalene. (Compound 118.)

Active Ingredients

Hexachloro-hexahydro-dimethano-naphthalene .....——%
Related compounds .....——%

ALLETHRIN** . . . *dl*-2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one esterified with a mixture of cis and trans *dl*-chrysanthemum monocarboxylic acids. (Allyl homolog of Cinerin 1. Synthetic pyrethrins.)

Active Ingredient

Allyl homolog of Cinerin 1. (Allethrin) .....——%

ARAMITE* . . . product containing 2-(*p-tert*-butyl-phenoxy)-1-methylethyl 2-chloroethyl sulfite. (88R. Alkyl aryl sulfite.)

Active Ingredient

2-(*p-tert*-butylphenoxy)isopropyl 2-chloroethyl sulfite.....——%

BHC . . . 1,2,3,4,5,6-hexachlorocyclohexane, consisting of several isomers and containing 12 to 14 per cent of the gamma isomer. (Ben-

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Active Ingredients

Gamma isomer of Benzene Hexachloride .....—%
Other isomers of Benezene Hexachloride .....—%

CHLORDANE** . . . 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene. (Velsicol 1068*. Octachlor*. Octa-Klor*).

Active Ingredient

Technical Chlordane* ....—%

*Equivalent to —% of octachloro-4,7-methano-tetrahydro-indane, and —% of related compounds.

BIS(*p*-chlorophenoxy)methane. [Di(4-chlorophenoxy)methane. K-1875. Neotran*].

Active Ingredient

Bis(*p*-chlorophenoxy)methane —%

---

p - CHLOROPHENYL *p* - CHLOROBENZENESULFONATE. (K-6451. Ovotran*).

Active Ingredient

p-chlorophenyl *p*-chlorobenzenesulfonate .....—%

COMPOUND 923 . . . 2,4-dichlorophenyl ester of benzenesulfonic acid. (Genitol 923).

Active Ingredient

Dichlorophenyl Benzenesulfonate —%

COMPOUND 22008 . . . 3-methyl-1-phenyl-5-pyrazolyl dimethylcarbamate. (G-22008).

Active Ingredient

3 - Methyl - 1 - phenyl - 5 - pyrazolyldimethylcarbamate ..—% (?)

CS-645* . . . 1,1-bis(*p*-chlorophenyl)-2-nitropropane. (Prolan*).

Active Ingredient

Bis(*p*-chlorophenyl)nitropropane —%

CS-674A* . . . 1,1-bis(*p*-chlorophenyl) - 2 - nitrobutane. (Bulan*).

Active Ingredient

Bis(*p*-chlorophenyl)nitrobutane —%

CS-708* . . . mixture of 1 part 1,1 - bis(*p* - chlorophenyl) - 2 - nitropropane (CS-645A) and 2 parts 1,1-bis (*p* - chlorophenyl) - 2 - nitrobutane (CS-674A). (Dilan*).

Active Ingredients

Bis(*p*-chlorophenyl)nitropropane —%
Bis(*p*-chlorophenyl)nitrobutane —%

D-D MIXTURE . . . mixture of 1,2-dichloropropane and 1,3-dichloropropane. (D-D*).

Active Ingredients

1,2-Dichloropropane .....—%
1,3-Dichloropropane .....—%

DDT . . . commercially available dichloro-diphenyl-trichloroethane, the principal constituent of which is 1,1,1 - trichloro - 2,2 - bis(*p* - chlorophenyl)ethane. (Chlorophenothane. U. S. Pharmacopoeia 14:136:1950).

Active Ingredient

Dichloro-diphenyl-trichloroethane (DDT) .....—%

DFDT . . . 1,1,1-trichloro-2,2 - bis(*p*-fluorophenyl)ethane. (Fluorine analog of DDT).

Active Ingredient

Difluoro-diphenyl-trichloroethane —%

DIELDRIN** . . . not less than 85 per cent of 1,2,3,4,10,10-hexachloro-6,7,-epoxy-1,4,4a,5,6,7,8,8a-octahydro - 1,4,5,8 - dimethanonaphthalene. (Compound 497).

Active Ingredient

Hexachloro-epoxy Octahydro Endoendo Dimethanonaphthalene —%

DIISOPROPYL p-NITROPHENYL THIOPHOSPHATE . . . 0,0-diisopropyl 0-*p*-nitrophenyl thiophosphate. (Compound 3456).

Active Ingredient

0,0-diisopropyl-0-*p*-nitrophenyl thiophosphate .....—% (?)

DIMETHYL CARBATE . . . dimethyl ester of cis-bicyclo(2.2.1)-5-heptene-2,3-dicarboxylic acid.

Active Ingredient

Dimethyl Bicycloheptene-dicarboxylate .....—%

DMC . . . 4.4-dichloro-alpha-methylbenzhydrol. [Di(*p* - chlorophenyl)methylcarbinol. 1,1-bis(*p*-chlorophenyl)ethanol. Dimite*].

Active Ingredient

1,1-Bis(*p*-chlorophenyl)ethanol —%

E-1059 . . . 0-[2-(ethylmercapto)ethyl] 0,0-diethyl thiophosphate. (A trialkyl thiophosphate. See Systox).

Active Ingredient

0-[2-(ethylmercapto)ethyl]-0,0-diethyl thiophosphate .....—%

EPN* . . . 0-ethyl 0-*p*-nitrophenyl benzenethiophosphonate.

Active Ingredient

Ethyl *p*-nitrophenyl thiono benzenephosphonate .....—%

2-ETHYL-1,3-HEXANEDIOL. (Rutgers 612*).

Active Ingredient

Ethylhexanediol .....—%

ENDRIN** . . . 1,2,3,4,10,10-hexachloro-6,7,epoxy - 1 - 4,4a,5,6,7,8,8a-octahydro-1,4,5,8 -endo-endo-dimethanonaphthalene. (An isomer of Dieldrin).

Active Ingredient

Hexachloro epoxy octahydro endo-endo dimethano naphthalene —% (?)

HEPTACHLOR** . . . 1(or 3a),4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene. (Velsicol 104*. E-334).

Active Ingredient

Heptachlor (Heptachloro-tetrahydro-methanoindene) ....—%

HETP . . . mixture of ethyl polyphosphates containing 12 to 20 per cent of tetraethyl pyrophosphate. (Hexaethyl tetraphosphate).

Active Ingredients

Tetraethyl pyrophosphate..—%
Other Ethyl Phosphates....—%

INDALONE* . . . butyl ester of 3,4-dihydro-2,2-dimethyl-4-oxo-1,-2H-pyran-6-carboxylic acid. [n-butyl mesityl oxide oxalate. Butopyronoxyl, (U. S. Pharmacopoeia 14:91:1940)].

Active Ingredient

Butyl dimethyl dihydro gamma

Emphasis on Safety!
...on High Gloss!
...on Durability!

SAF-FLOR

. . . a new anti-slip floor wax

Have you tested a sample of this new anti-slip, high-gloss floor wax? If not, let us send you a sample today!

An entirely new safety wax based on a special patented copolymer. Water resistant in 12-24 hours. Easy to apply and remove. Withstood damp mopping for 25 consecutive days. Freezing does not impair gloss more than 10%.

Available to the trade under SAF-FLOR label or your own private brand. For full information, write to

SHAWMUT SPECIALTY COMPANY
315 Centre Street **Boston, Mass.**

pyrone .....——%

LINDANE** . . . gamma isomer of benzene hexachloride of not less than 99 per cent purity, 1,2,3,4,5,-6-hexachlorocyclohexane.

Active Ingredient

Gamma isomer of benzene hexachloride (from Lindane) . . . .——%

ISODRIN . . . 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,-4,5,8-endo-endo-dimethanonaphthalene. (An isomer of ALDRIN).

Active Ingredient

(No name yet set up officially).

MALATHON** . . . 0,0-dimethyl dithiophosphate of diethyl mercaptosuccinate. [Compound 4049. S-(1,2-dicarbethoxyethyl) 0,0-dimethyl dithiophosphate].

Active Ingredient

Malathon (0,0-dimethyl dithiophosphate of diethyl mercaptosuccinate) ——%

METACIDE* . . . product containing methyl parathion and parathion,

Active Ingredients

Parathion (0,0-diethyl 0-*p*-nitrophenyl thiophosphate . .——%
0,0-dimethyl 0,*p*-nitrophenyl thiophosphate) .....——%

METHOXYCHLOR** . . . 1,1,1-trichloro-2,2-bis(*p*-methoxyphenyl)ethane. (Marlate*. DMDT).

Active Ingredient

Technical Methoxychlor* . .——%
*Equivalent to ——% 2,2-bis(*p*-methoxyphenyl)-1,1,1-trichloroethane, and ——% of related compounds.
(Technical Methoxychlor contains about 88% of the *p,p'*-isomer and 12% of related compounds).

METHYL PARATHION . . . 0,0-dimethyl 0,*p*-nitrophenyl thiophosphate. (Methyl homolog of parathion).

Active Ingredient

0,0-dimethyl 0,*p*-nitrophenyl thiophosphate . . . . . .——%

4-METHYLUMBELLIFERONE 0,0-DIETHYL THIOPHOSPHATE. (0,0-diethyl thiophosphoric acid ester of 7-hydroxy-4-methylcoumarin. Potasan*. E-838).

Active Ingredient

(No name yet set up officially).

MGK-264* . . . N-(2-ethylhexyl)bicyclo(2.2.1)-5-heptene-2,3-dicarboximide. [N-octylbicyclo(2.2.-1)-5-heptene-2,3-dicarboximide. Octacide 264*. Van Dyke 264*]

Active Ingredient

Octyl bicycloheptene dicarboximide ——%

PARA-OXON . . . diethyl *p*-nitrophenyl phosphate. (Oxygen analog of parathion. E-600).

Active Ingredient

Diethyl *p*-nitrophenyl phosphate ——% (?)

PARATHION** . . . 0,0-diethyl 0,*p*-nitrophenyl thiophosphate, (E-605. Compound 3422).

Active Ingredient

Parathion (0,0-diethyl 0,*p*-nitrophenyl thiophosphate) . .——%

PIPERONYL BUTOXIDE . . . product containing as its principal constituent alpha-[2-(2-butoxyethoxy)-methoxy]-4,5-methylenedioxy-2-propyl toluene. [(butyl carbitol) (6-propylpiperonyl)ether. Compound 312].

Active Ingredient

Technical piperonyl butoxide* ——%

*Equivalent to ——% of (butyl carbityl) (6-propyl piperonyl)ether, and ——% of related compounds.

PIPERONYL CYCLONENE . . . mixture of 3-alkyl-6-carbethoxy-5(3,4-methylenedioxyphenyl)-2-cyclohexen-1-one and 3-alkyl-5(3,4-methylenedioxyphenyl)-2-cyclohexen-1-one. (Piperonyl Cyclohexenone).

Active Ingredient

Technical piperonyl cyclonene* ——%

*Equivalent to ——% of 3-isoamyl-5-(methylene dioxyphenyl)-2-cyclohexanone and its 6-carbethoxy derivative, and ——% of related compounds.

Q-137 . . . 1,1-dichloro-2,2-bis(*p*-ethylphenyl)ethane.

Active Ingredient

Diphenyl Diethyl Dichloroethane ——% (?)

R-242 . . . 70 per cent of *p*-chlorophenyl phenyl sulfone plus 30 per cent of related sulfones. (Sulphenone*).

Active Ingredients

p-chlorophenyl phenyl sulfone —%
Related sulfones .....—%

SCHRADAN . . . octamethyl pyrophosphoramide. [bis(bis-dimethylamino) phosphonous anhydride. OMPA. Pestox III*].

Active Ingredient

Octamethyl pyrophosphoramide ——%

SULFOTEPP . . . tetraethyl dithiopyrophosphate. (Dithione*).

Active Ingredient

Tetraethyl dithiopyrophosphate ——%

SYSTOX* . . . product containing E-1059.

Active Ingredient

(Same as E-1059).

TDE . . . commercially available dichloro-diphenyl-dichloroethane, the principal constituent of which is 1,1-dichloro-2,2-bis(*p*-chlorophenyl)-ethane. (DDD. Rhothane*).

Active Ingredient

Dichloro-diphenyl-dichloroethane ——%

TEPP . . . tetraethyl pyrophosphate. (TEP).

Active Ingredient

Tetraethyl pyrophosphate . .——%

TOXAPHENE** . . . chlorinated camphene having a chlorine content of 67-69 per cent. (Compound 3956).

Active Ingredient

Toxaphene (Technical chlorinated camphene, (chlorine content 67-69%) .....——%

Fungicides

CHLORANIL** . . . 2,3,5,6-tetrachloro-1,4-benzoquinone. (Tetrachloro-*p*-benzoquinone. Tetrachloroquinone. Spergon*).

Active Ingredient

Chloranil (Tetrachloro-parabenzoquinone) .....——%

CAPTAN** . . . N-trichloro-

(*Turn to Page* 137)

Aerosol Market...

Trends in consumer purchases and retail distribution of aerosol products in 1952 analyzed in the sixth annual survey of Kinetic Chemicals Division of du Pont

STEADY growth of the aerosol market in 1952 was reported in sixth annual dealer survey conducted by the Kinetic Chemicals Division of E. I. du Pont de Nemours & Co., Wilmington, Del. The 1952 survey of the aerosol market was released recently and contains changes in the method of market sampling needed to reflect new developments in the retail distribution of aerosol products. Thus, although the per cent of dealers interviewed who reported they stocked aerosol products was 74 per cent in 1952, against 75 per cent in 1951, there is no decrease in growth of distribution. The drop is due to a change in sampling technique done to provide a more reliable picture for the various types of stores. In relating the 1952 sample to that of 1951 by a weighting process, it is found that a figure of 82 per cent stocking aerosols is arrived at.

In addition to the changes made in the 1952 report, it was also announced that the studies will now be made every other year, rather than annually as has been done since 1947. Next year a study will be made at the consumer level. Then, in the future, the dealer and consumer studies will be made in alternate years.

As in the 1951 survey, products are divided into two classes: household aerosol products, of which insecticides are the best sellers, and personal aerosol products. Besides listing types of outlets through which aerosol products are sold, in the new survey retailers are rated as large, medium and small.

The primary objectives of the survey were: to measure retailer knowledge of aerosol products; to determine the attitude of dealers toward aerosol products; to provide a measurement of the growth or decline of distribution of aerosol products in six primary types of retail outlets; to determine negative factors retarding dealer stocking and consumer sales.

A total of 16 questions make up the 1952 survey, which is comprised of 2,233 personal interviews conducted in six classes of retail outlets in 60 U. S. cities during July, 1952. In 1951 there were 2,011 interviews and in 1947, 505. More department stores (408) were interviewed in 1952 than in 1951 (98). Drug stores, the second largest category of outlets participating in the aerosol survey in 1952, totaled 374, down from a 1951 first place total of 699. Fewer grocery stores were queried in 1952 (361) than in the previous year (506), when this type of outlet was second largest number interviewed. Hardware stores interviewed in 1952 were fourth in the standings with 366, a drop from 1951, when 389 participated. The number of variety and 5 and 10c stores queried in 1952 was up sharply to 355, as against 11 in 1951. Also larger in 1952 was the service station total: 369 to 215 for 1951.

In the personal products field, shaving cream appears to have the strongest distribution, with hair lacquers a close second. Drug stores, as might be expected, led the list of principal outlets for personal products.

A large majority of dealers stocking aerosol products — ranging from 70 per cent of the grocery store owners to 81 per cent of the hardware outlets—said they considered aerosol method of dispensing superior to all others because of its ease and efficiency of operation.

Other questions and answers given in the survey dealt with comparative sales of aerosol packaged products and those using other types of packaging in the field surveyed. Aerosol dispensed insecticides had percentages ranging from 68 (service stations down to 22 for variety and 5 and 10

HOUSEHOLD AEROSOL PRODUCTS — **% OF AEROSOL DEALERS WHO STOCK**

	DEPT. STORES			DRUG STORES			GROCERY STORES			HARDWARE STORES			VARIETY 5 & 10c STORES			SERVICE STATIONS		
	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S
INSECTICIDES FOR FLYING INSECTS	82	88	*	98	97	97	86	83	74	98	95	95	87	98	88	78	89	78
INSECTICIDES FOR CRAWLING INSECTS	76	58	*	94	82	92	84	78	58	88	85	70	88	72	80	58	54	48
ROOM DEODORANTS	68	48	*	87	77	86	53	48	37	51	46	43	37	48	34	8	6	10
MOTH PROOFERS	55	44	*	84	57	53	15	12	5	44	44	30	26	19	31	10	6	30
CHRISTMAS "SNOW"	35	32	*	48	25	22	6	8	5	36	32	23	47	42	34	5	6	10
PLASTIC SPRAYS	27	15	*	23	20	17	6	5		40	31	25	14	10	7	10	20	
PAINTS & LACQUERS	28	17	*	4	5	3	1	3		56	46	43	6	6		23	36	50
CLEANERS			*	3	5					17	8	5	11	4				

PERSONAL AEROSOL PRODUCTS

KEY: L—LARGE M—MEDIUM S—SMALL

	DEPT. STORES			DRUG STORES			GROCERY STORES			VARIETY 5 & 10c STORES		
	L	M	S	L	M	S	L	M	S	L	M	S
SHAVING CREAM OR LATHER	41	30	*	98	88	81	17	7	16	20	18	17
HAIR LACQUER	63	48	*	88	86	58	8	1		14	4	3
PERSONAL DEODORANTS	54	51	*	46	46	56	18	11	18	22	25	21
SUN TAN SPRAYS	38	25	*	52	42	36	2	1		8	4	
COLOGNES & PERFUMES	42	24	*	26	16	19	2	1	5	9	8	3
HAIR SHAMPOOS	22	22	*	37	26	31	8	5	5	8	3	7
SUN AND OTHER BODY PREPARATIONS	18	15	*	31	22	22	3	1		3	1	
DEODS.	3	2	*	3	5	8	1			6	1	

*Only 1 small dept. store interviewed stocked any aerosol products, so no data is shown because sample is too small.

(Service stations are not included because they do not stock personal products. Hardware stores are also not shown because only a very small percentage stock any personal products.)

THE *Aerosol Valve* FOR YOUR PRODUCT *by Precision*

●The picture tells a story . . . a story of overwhelming popularity, tremendous growth and continued reliance on a quality product . . . PRECISION VALVE.

The many millions of valves in daily use, representing over one hundred completely satisfied customers in the United States and Canada, is your assurance that PRECISION has the answer to your aerosol program regardless of product or container.

We invite your inquiry to enable our staff of aerosol valve technicians to work cooperatively in satisfying your valve requirements.

PRECISION

Precision Valve Corporation

700 NEPPERHAN AVENUE • YONKERS 3, NEW YORK

cent stores. Room deodorants and moth proofers followed in that order.

Reasons for not stocking aerosols as repeat sellers and dealers reports of consumer objections to aerosols are covered fully in the new survey.

Need for increased product promotion was evident in the large number of dealers who said they were not familiar with some of the aerosol packaged products. In the personal products field, for example, 72 per cent of the dealers interviewed said they had not heard of certain sun tan preparations; 65 per cent were unfamiliar with aersol packaged colognes, perfumes and hair shampoos, and 50 per cent were not acquainted with some of the aerosol deodorants.

Aerosol identification and awareness of advertising are among other questions touched on in the survey which is available by writing Kinetic Chemicals Division, E. I. du Pont de Nemours & Co., Wilmington 98, Del.

Witco Moves Offices

Witco Chemical Co., New York recently announced removal of its headquarters offices from 295 Madison Avenue to 260 Madison Avenue.

Chlordane Leaflet

Chlordane for control of cattle lice and ticks is the subject of a leaflet issued recently by Velsicol Corp., Chicago. It carries information on when to apply chlordane against these pests, on methods of application and on formulation.

Issue Cresol Safety Data

Information on safe handling and storage of cresols, or cresylic acids is assembled in manual sheet SD-48, issued recently by the Manufacturing Chemists Association, Inc., Washington. In industry, cresols are a hazard principally to the eyes and skin, although they are also toxic and constitute a moderate fire menace. The 16-page data sheet describes precautions to be observed in unloading, emptying, handling, storage and disposal of the materials. It also deals with health hazards and their control. Copies are available from the association at 25 cents each.

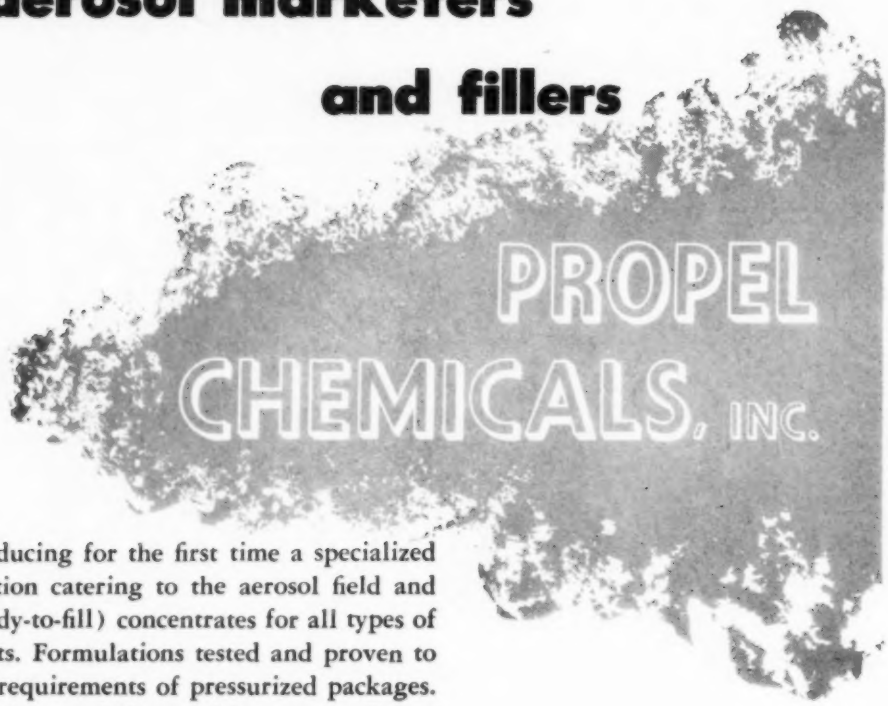
Ambrose Chantler Retires

Ambrose R. Chantler retired after thirty-four years with E. I. du Pont de Nemours & Co., Wilmington, Del., it was announced recently. He was sales adviser for the organic chemicals department since June 1950. Mr. Chantler served as 1951-52 president of the Synthetic Organic Chemical Manufacturers Association.

Tracy Heads Enjay

Osgood V. Tracy, general manager of the chemical products department of Esso Standard Oil Co., was recently elected president of Enjay Co., sales affiliate, marketing petroleum chemicals nationally.

announcing to aerosol marketers and fillers



Introducing for the first time a specialized organization catering to the aerosol field and providing complete (ready-to-fill) concentrates for all types of aerosol products. Formulations tested and proven to satisfy the special requirements of pressurized packages. A convenient and dependable source offering an all-inclusive service and *a new approach to the aerosol industry.*

● **to the filler**

freedom from multiple material controls, inventory worries, formulation troubles, purchasing problems and quality-control headaches.

Aerosol chemicals for complete mixes:

Insecticides, Moth Formulations
Automotive Specialties
Household Items
Deodorants
Personal Products

● **to the marketer**

assurance of proven quality, economy, freedom to concentrate on marketing and merchandising, constant uniformity, continuous technical service.

Production facilities located near major filling points

PROPEL CHEMICALS, INC. *Sales Office:* 415 Lexington Avenue, New York 17 • MU 7-8313

C.S.M.A. Reelects

(*From Page* 119)

eral laws in their wording and meaning. He then mentioned cases where adulterations were found such as salt in fertilizer and clay in hog feed. He described how people tried to get around the specific wording of the laws.

Sanford J. Hill, E. I. du Pont de Nemours & Co., Wilmington, described the problems faced by a technical man when he looks at labeling requirements. He must prepare subject matter that will be acceptable nation-wide and to be equipped for the task, he should be thoroughly familiar with the labeling requirements of federal, state and municipal laws. Since products often fall under more than one group of laws, it is highly desirable that the requirements of various fields of regulation should not conflict.

N. M. Walker, Pennsylvania Salt Mfg. Co., Philadelphia, discussed the label designer and his relations to the label laws. A label designer must take all material which must appear on a label and attempt to design it in such a manner that the consumer is protected, the various laws are complied with and the company is relieved of all liability and the sales manager is satisfied. Mr. Walker then showed various labels and how they did or did not comply with the law.

John D. Conner, C.S.M.A. counsel, Washington, D. C. talked briefly on the legal aspects of labeling and mentioned cases where the label and advertising claims did not coincide. He also mentioned that certain labeling claims made the manufacturer liable for the product.

Paul C. Olsen, director of marketing research, Topics Publishing Co., New York, delivered a paper on "Sales of Household Insecticides in Retail Outlets". He gave a brief outline of the market for household insecticides covering the actual outlets and the trend of the market. Among the predominant outlets for household insecticides are hardware stores, department stores and variety stores.

In the past four years, the growth of aerosols has been rapid—from a little over $15 million in 1948 to $36 million in 1952. In 1948, the drug store share of aerosol type insecticides was half the entire total. By 1951, the drug store share was down to less than 1/3. Dollarwise, the drug store sales of aerosols were half again as large in 1951 as they were in 1948. The 1951 total sales of U. S. drug stores were the highest ever. They topped the preceding year by more than 7%. In 1948, food store sales of aerosols were less than 1/3 those of drug stores. The food store share of total sales of these articles that year was 15%. In 1951, the total for food stores was 26% and was out of a market that was nearly 2½ times the dollar total of 1948.

Insecticide Names

(*From Page* 131)

methylmercapto-4-cyclohexene-1,2-dicarboximide. (N-trichloromethylthio tetrahydrophthalimide).

Active Ingredient

Captan (N-trichloromethylmercapto-4-cyclohexene-1,2-dicarboximide) .....——%

FERBAM** . . . ferric dimethyl dithiocarbamate. (Fermate*. Karbam*).

Active Ingredient

Ferbam (Ferric dimethyl dithiocarbamate) .....——%

NABAM** . . . disodium ethylene bisdithiocarbamate. (Dithane*).

Active Ingredient

Nabam (Disodium ethylene bisdithiocarbamate) .....——%

ZINEB** . . . zinc ethylene bisdithiocarbamate.

Active Ingredient

Zineb (Zinc ethylene bisdithiocarbamate) .....——%

ZIRAM . . . zinc dimethyl dithiocarbamate. (Zerlate*).

Active Ingredient

Ziram (Zinc dimethyl dithiocarbamate) .....——%

THIRAM** . . . tetramethylthiuram disulfide. (Thiram).

Active Ingredient

Thiram (Tetramethylthiuram disulfide) .....——%

The names of the active ingredients followed by a question mark, will probably be accepted, but have not yet been officially adopted by the Department of Agriculture.

That New Product

(*From Page* 127)

men and guide them in solving the problems. It is the effective argument which can and will jar the chemist out of his complacency and start him testing and looking into the new product.

What type of man can best introduce a new product successfully? Based on experience, he will be primarily a salesman rather than exclusively a technologist. The job needs a man with a selling spark, an enthusiast, more than it needs the cold technical facts as may be presented by strictly a scientist. It needs an enthusiastic salesman because he will have many initial obstacles to overcome which the sales technologist with a wholly scientific approach might be unable to surmount.

Experience has taught us that it is better to hire confirmed salesmen who may need considerable technical training than to hire technical men who have had no selling experience. The man who comes out of the laboratory as a rule may and often does lack that sales sense to keep everlastingly after the sale to make it, and to stop talking after the sale is made. He may even win a technical argument with the customer's chemist, but irrevocably lose the sale at the same time. It has happened and does happen regularly.

—— • ——

Methoxychlor in Fly Control

Methoxychlor provided a minimum of five to seven weeks control of houseflies in barns. Masking of methoxychlor-spray deposits by fly excrements reduced the degree of control in unscreened dairy barns near uncontrolled fly breeding areas. William L. Barrett, Jr., *J. Econ. Emtomol.* 45, 121-2, 1952.

Breuer Names MacEachern

Gordon A. MacEachern, Toronto has been appointed recently by Breuer Electric Manufacturing Co., Chicago, to distribute the "Tornado" line of commercial and industrial vacuum cleaners and portable electric blowers. MacEachern branches in London, Port Arthur, and Hamilton, as well as the Toronto home office demonstrate and sell the equipment. The firm distributes maintenance equipment, manufacturers sanitary chemicals, soaps, and waxes, and operates floor finishing and care-taking service.

Gefen at Felton's N. Y.

Felton Co., Versailles, France, was represented by Leon Gefen at the annual meetings held recently at Felton Chemical Co. headquarters in Brooklyn. Mr. Gefen directs the activities of the European Felton organization and acts as general purchasing agent of continental essential oils and natural aromatic products for Felton, Brooklyn and its branches in Los Angeles and Montreal. He maintains homes in Grasse and Paris.

Attapulgus Minerals

Attapulgus Clay Co., Philadelphia, recently announced sale of its fuller's earth business to the Minerals Separation North American Corp. The combined business operates under the name of Attapulgus Minerals & Chemicals Corp., Philadelphia.

The new company's general offices are at Philadelphia. It operates fullers earth mines and plants at Attapulgus, Ga., process design, engineering, research and development, laboratory facilities at Camden, N. J., Lakeland, Fla., Carlsbad, N. M., and Hibbing, Minn.

Berry Joins El Dorado

El Dorado Oil Works, San Francisco, recently announced appointment of Arthur P. Berry, formerly director of fatty acid sales for Genearl Mills, Inc., Mnneapolis, as manager of the fatty acid division. Mr. Berry was associated with General Mills for eight years, during which he made a complete survey of the fatty acid industry, and acted as production manager before joining the sales division. Previously he was general foreman of fatty acid and glycerine plants for Armour & Co., Chicago.

Wrisley Advances Litkowski

Paul Litkowski has been appointed sales manager of the drug and department store division of the Allen B. Wrisley Co., Chicago, it was announced recently. He has been assistant sales manager of this department and formerly covered the Ohio, Indiana and Kentucky territory for the company.

Coming Meetings

AAEE Southwestern Branch, Hotel Galvez, Galveston, Tex., February 26, 27, 1953.

AAEE North Central States Branch, St. Louis, March 19, 20, 1953.

Association of American Soap & Glycerine Producers, Waldorf-Astoria Hotel, New York, January 27, 28, 29, 1953.

Canadian Pest Control Operators, 11th annual conference, Ontario Agricultural College, Guelph, Canada, May 11, 12, 13, 1953.

Chemical Specialties Manufacturers Association, midyear meeting, Hotel Drake, Chicago, May 17-19.

Eastern Pest Control Operators, 13th annual conference, University of Massachusetts, Amherst, Mass., February 5, 6, 7, 1953.

National Pest Control Association, 21st Annual Convention, Hotel Nicollet, Minneapolis, October 19, 20, 21, 1953.

National Sanitary Supply Association, annual exhibit and convention, Conrad Hilton Hotel, Chicago, March 22-25, 1953.

New Jersey Annual Short Course, Trenton, January 19, 20, 21, 1953.

Pennsylvania Annual Short Course, Pennsylvania State College, March 3, 4, 5, 1953.

Plant Maintenance Conference and Show, Public Auditorium, Cleveland, January 19-23, 1953.

Purdue Pest Control Operators, 17th annual conference, Purdue University, Lafayette, Ind., January 26-30, 1953.

Southern Pest Control Operators, 13th annual conference, Louisiana State University, Baton Rouge, La., February 2, 3, 4, 1953.

Synthetic Organic Chemical Manufacturers Association, joint meeting with MCA, Greenbrier Hotel, White Sulphur Springs, W. Va., June 11-13.

Toilet Goods Association, annual convention, Waldorf-Astoria Hotel, New York, May 12, 13, 14, 1953

Salesmen Install Officers

The Salesmen's Association of the American Chemical Industry installed the following officers for 1953 at a meeting held January 21 at the Hotel Roosevelt, New York: Robert J. Milano, Millmaster Chemical Corp., president; Warren F. Schumacher, J. T. Baker Chemical Co., vice-president; John F. Henry, Adams-Henry Chemical Co., treasurer; and Edward L. Collins, Chilean Nitrate Sales Corp., secretary. Vacancies on the board of directors for two year terms will be filled by Ralph L. Ericsson, Sumner Chemical Co.; LeRoy P. London, E. I. du Pont de Nemours & Co.; George E. Kuehn, Carbide and Carbon Chemicals Co.; Walter Johnson, Columbia-Southern Chemical Co.; and Harry P. Smith, Mathieson Chemical Corp. A one year term on the board will be served by Vincent L. Rebak of Heyden Chemical Corp.

Armour Contest Awards

In a display contest sponsored by Armour & Co., Chicago, to supplement its recent $40,000 "Dial Soap" citizenship contest, 101 retailers won $3,975 in cash prizes. They showed store displays urging people to vote in the presidential election.

Diversey Using Isotopes

Radio-active isotopes to test effectiveness and behavior of sanitation products are being purchased from the government by Diversey Corp., Chicago, it was announced recently. Apart from the use of radio-active carbon to determine how effective certain cleaners are in removing soils from utensils, wall and floor surfaces and equipment in institutions and public buildings, the new technique is expected to solve such problems as determination of corrosion and absorption of inhibitive chemicals on metal, the amount of absorption of glass and ceramic materials, the tracing of bacteria to learn where they lodge and multiply, and the study of insecticidal action based on tagged carbon introduced within the insecticide.

Besides radio-active carbon, radio-active glucose and calcium will be used by Diversey.

News

Mowry Joins Hopkins

Wils Mowry, formerly of S. B. Penick & Co., New York, recently joined Hopkins Agricultural Chemical

WILS MOWRY

Co., Madison, Wis. In his new position, Mr. Mowry assists James Hopkins, president, in sales development work on "Warfarin" rodenticide and in securing industry-wide distribution of a new line of general insecticides and custom blended insecticide dusts.

A. H. Dean Joins Reichhold

Archie H. Dean, formerly director of sales for the Barrett Division of Allied Chemical & Dye Corp., New York, recently joined Reichhold Chemicals Inc., Detroit, as sales manager of its newly formed Specialty Products Division. Mr. Dean, who is an alumnus of the University of Delaware, and earlier had been with the chemical sales department of Eastman Kodak Co. and Hercules Powder Co., is making his headquarters at 630 Fifth Ave., New York, international headquarters of Reichhold.

Ill. PCO's Elect

The Illinois Pest Control Association, at its annual business meeting, made only one change in its list of officers, Jerry Kramer of Economy Exterminators being elected secretary to succeed Miss Phyllis Kerstein of A-Advanced Exterminating Service.

Other officers re-elected were: Joseph De Fiore, Globe Exterminating Co., president; Robert Berns, Aerosol Engineers, vice president; and James J. McDaniels, International Exterminating Co., treasurer. New members of the board of directors are Sam Grossman, AND. Exterminating Co., and Dick Prescott, Protex Service, Inc., who replace Harold Jennings and Elmer Kuntz. On Dec. 6 the Illinois Association held its first annual dinner-dance at the Belden-Stratford Hotel with 100 P.C.O.'s and their wives in attendance. Guests of honor were Dr. Ralph Heal, technical director of NPCA and George Hockenyos, Sentinel Labs., Springfield, Ill., who was selected as NPCA's 1951 "Pest Control Man of the Year." Late this month the Illinois Association was to meet and make plans for a large delegation to the Purdue pest control conference.

Chas. E. Glasser Dies

Charles Edwin Glasser, treasurer of the Diversey Corp., Chicago, died suddenly Nov. 25 in a Washington, D. C. hotel. Mr. Glasser, who was 58 years old, had been associated with Diversey since 1928. He was also president of the General Reduction Co. Surviving are his widow, Marguerite, and two daughters.

Sanitary Services Expand

Sanitary Services, Inc., Boston, opened a new branch at Halifax, Nova Scotia, January 1, according to an announcement by Nathan Concannon, president. This is the fifth branch to be established by the Boston firm. General pest control and other sanitation services are carried on by the company which heretofore has confined its operations to New England.

West Advances Flatow

Will Flatow, Jr., formerly advertising manager of West Disinfecting Co., was recently named assistant general sales manager. Mr. Flatow, who has been with West for 15 years, originally served in the sales department. Later he became advertising-export manager, and in 1949 was appointed one of two assistants to the general sales manager. In 1951, he relinquished his post as advertising manager. As assistant general sales manager he serves under John A. Manley,

WILL FLATOW, JR.

general sales manager for West.

In addition to his other functions, Mr. Flatow is chairman of the entertainment committee of the Chemical Specialties Manufacturers Assn.

Meinhardt Reorganizes

J. A. Meinhardt, for many years a familiar Chicago figure in the sanitary supplies manufacturing and distributing field, has reorganized his business which was liquidated some time ago and has begun operations as the Meinhardt Cleaning Materials Co., at 2314 W. Van Buren st., Chicago.

CSMA Luncheons Resume

Monthly luncheon meetings of the Chemical Specialites Manufacturers Assn. resume on Wednesday, Jan. 21 at the Hotel Roosevelt, New York, it was announced recently by H. W. Hamilton, C.S.M.A. secretary. Other luncheons scheduled for the Hotel Roosevelt will be held Feb. 18, Mar. 18 and Apr. 15. There will be no May luncheon, since the association holds its mid-year meeting at the Hotel Drake, Chicago, May 17-19. Names of speakers for the luncheons will be announced shortly.

New By-Products Germicide

By-Products Processing Laboratories, Long Island City, N. Y. recently announced a new germicide, "Phenamin OD-100." The product, a combination germicide-fungicide, is used for preventing mold and decay and protecting substances vulnerable to bacteria and fungi such as cardboard, fabrics and wood. Soluble in most organic solvents such as alcohols, waxes, chlorinated hydrocarbons, esters, etc., for practical purposes, the product is insoluble in water. It has a low toxicity to warm-blooded animals and is not irritating to the human skin in concentrations up to 2%. It has a low volatility.

Stern Heads Can Makers

David Stern, treasurer and general manager of Stern Can Co., Boston, was elected president of the Can Manufacturers Institute, it was announced recently. He succeeds Richard P. Swartz, consultant of American Can Co., New York, as president.

Polish, Cleaner Test List

The Rubber Manufacturers Association, New York, recently announced that cleaners and polishes intended for use on rubber flooring may now be tested for approval and listing under the association plan. The testing period extends from Nov. 15, 1952 to Jan. 31, 1953, inclusive. The new approved products list resulting from the new tests is in effect from Mar. 1, 1953 to Feb. 28, 1955, inclusive.

Manufacturers seeking to have their rubber floor polishes or cleaners approved by the Association's Rubber Flooring Manufacturers Division are advised to notify Skinner & Sherman, Inc., Boston, to purchase a sample of the product on the open market and test the material according to the specifications of the Division covering rubber floor cleaners and polishes. The charge for test rubber floor polishes is $25, while that for testing rubber floor cleaners is $20.

Copies of the approved products list may be obtained at cost. Brand owners desirous of listing private brands may do so providing they provide the association with affidavits that the products are identical with previously approved factory brand products and by paying the association $5 for each such private brand listing.

Consultants Elect Snell

Foster D. Snell, head of the New York consulting firm bearing his name, was recently elected president of the Association of Consulting Chemists and Chemical Engineers, at the organization's recent annual meeting.

Silvera Joins Larvacide

Conrad C. Johnson, president of Larvacide Products, Inc., New York, recently announced that George E. Silvera has become associated with the company in connection with the promotion of sales of "Larvacide" for soil fumigation, methyl bromide and its compounds. He is working out of the home office at 117 Liberty Street, New York 6, N. Y.

Mr. Silvera has broad technical and practical training in the agricultural field. In 1933 he was graduated with honors from the Long Island Agricultural and Technical Institute at Farmingdale, and received a B. S. degree in Marketing and Vegetable Crops in 1940 from Cornell University. He spends part of his time in the field and will be available for technical assistance on their application problems.

Dr. C. J. Weinman Dies

Dr. Carl J. Weinman of Champaign, Ill., entomologist of the Illinois Natural History Survey, died at Mercy Hospital, Urbana, Nov. 30, of acute poliomyelitis. Born in Middletown, O., March 27, 1915, Dr. Weinman, entered the University of Illinois and was graduated in 1936, after completing his public school education at Middletown. He went to the University of Minnesota for his master's degree and returned to Illinois in 1938 to work for his doctor's degree, which he received in 1940.

He is survived by his widow, the former Virginia Perkins of Chicago, to whom he was married in 1938; two sons, John Carl, 13, and James Robert, 4; a brother, Paul, of Tulsa, Okla.; and his father and stepmother of Middletown, O.

He began his association with the Illinois Natural History Survey as a laboratory assistant in the summers of 1934 and 1935. He was named assistant entomologist in 1937, special research assistant on a co-operative project of the Natural History Survey and the Illinois Agricultural Experiment Station in 1938, associate entomologist with the Survey in 1945, and entomologist in 1947. For the past eight years he has worked closely with Dr. George C. Decker, head of the Survey's Section of Economic Entomology, in research on insecticides.

Charles Pomerantz, Bell Exterminating Co., Newark, N. J., guest of honor (second from right) receives testimonial scroll from Jacques J. Hess, Exterminating Service Corp., New York, at an annual dinner held recently by more than 50 members of the Pest Control Division at the Fifth Avenue Hotel, on behalf of the Federation of Jewish Philanthropies current $20,000,000 maintenance campaign for its 116 hospitals and social service institutions. Mr. Pomerantz is the discoverer of the mite and mice carriers of a new disease to man now called "Rickettsialpox." Pictured at the presentation ceremony are: (left to right) Robert Murril, U. S. Public Health Service; Harry Raybin, Department of Health; Dr. Morris Hinenberg, Federation speaker; Jacques J. Hess; Nathan N. Sameth, Sameth Exterminating Corp. of America; Col. Leopold Phillip, Disinfecting and Exterminating Corp. of America; Charles Pomerantz; and Sidney Wimmer.

APPROVED

FRANKLIN'S CLEANER . . . for cleaning, stripping and maintaining all floors. A liquid wax soap that seals as it cleans. Highly concentrated . . . one gallon makes up to 40 gallons of fast acting cleaning solution. Cleans by saturation . . . no hard scrubbing.

FRANKLIN'S WAX . . . a tough, long wearing, self-polishing wax. Cuts maintenance costs on linoleum, rubber, asphalt tile, wood, etc. Withstands water and damp mopping indefinitely. Classified by Underwriters' Laboratories as anti-slip.

A COMPLETE LINE OF FLOOR MAINTENANCE MATERIALS AVAILABLE UNDER YOUR OWN LABEL . . . sales assistance and prompt delivery of materials are assured by Franklin factory representatives, offices and warehouses located in principal cities from coast to coast.

Thousands of Maintenance Managers use **AMERICAN STANDARD** man-sized wet-mops, sweep mops and applicators exclusively. The nation's most successful distributors regularly supply those thousands of **AMERICAN STANDARD** enthusiasts.

for both ROUGH and smooth floors

For years the VICTORY Wet Mop has been our biggest seller. Thousands of maintenance men use VICTORY wet mops exclusively! Heavy-duty, quality yarn . . Your best bet, if you want a mop of extraordinary durability, performance and economy

"BIG X" SWEEP MOP

This sweep mop is our leader. Snatches up dust on contact. It's nationally famous. A durable giant—available in widths up to 5 feet! Can be removed from the block for washing Once you try BIG X, you'll use no other.

HOLZ-EM APPLICATOR

You'll enjoy the fast, thorough performance of this luxurious, high-speed applicator. Reduces cost of applying wax, seals, varnish, etc. More professional floor finishers use HOLZ-EM than any other applicator

Jobbers

Complete catalog of our nationally-advertised mops, applicators, dusters, mitts, and custom-made items, on request.

"TOPS IN MOPS"
AMERICAN STANDARD MFG. COMPANY
Incorporated 1908
CHARLES E. KREBS and WALTER O. KREBS
2515 S. GREEN STREET • CHICAGO 8, ILL.

Jesse Gibson Retires

Jesse Gibson, of Wilmington, one of the founders of the wood naval stores industry and a veteran of 37 years' service with Hercules Powder Co., Wilmington, retired on Dec. 31. Mr. Gibson is a pioneer in developing markets for wood naval stores products. He joined the sales department of the original Yaryan Naval Stores Co., Brunswick, Ga., in 1912, and has been continuously engaged in marketing wood naval stores as the business was bought successively by Yaryan Rosin and Turpentine Co. in January, 1916, and by Hercules in May, 1920.

In 1919, he went to Europe for the Yaryan Company and set up a system of distributors for naval stores on the Continent. In 1928, Mr. Gibson went abroad again, this time for Hercules, to renew ties with Continental and English distributors.

New Insect. Concentrates

Prentiss Drug & Chemical Co., New York, recently announced the availability of two new insecticide concentrates which combine the effectiveness and safety of pyrethrum extract with the economy of certain synthetic chemicals.

They are "Prentox Pyronyl 20 Concentrate," containing 0.5 grams pyrethrins and four grams of piperonyl butoxide per 100 cubic centimeters, and "Prentox Pyronyl Roach Spray Concentrate," containing 1.2 grams pyrethrins and six grams piperonyl butoxide per 100 cubic centimeters.

"Prentox Pyronyl 20 Concentrate," at five percent (one part plus 19 parts of deodorized kerosene) is recommended as a space spray for use against flies, mosquitoes, gnats, wasps, moths and other flying insects and for direct spraying on spiders, ants, crickets, silverfish, etc. Applied as a surface spray at the rate of one pint per 380 square feet, "Prentox Pyronyl 20 Concentrate" is residually effective against many household pests.

The new roach spray concentrate, at a concentration of 7.5 percent (approximately one part plus 12 parts of deodorized kerosene) kills many crawling insects and related pests such as roaches, silverfish, spiders, ticks, ants, fleas, bed bugs, clothes moths and carpet beetles, as well as stored product pests including flour beetles, grain beetles, meal worm moths, weevils and many others.

Kinetic Opens Chi. Office

The opening of a midwestern district sales office at 7 S. Dearborn St., Chicago, Jan. 1, was announced recently by the Kinetic Chemicals Division of E. I. du Pont de Nemours & Co., Wilmington, Del. Glenn A. Piper, Jr., who joined the Kinetic Chemicals Division in July, 1951, has been assigned as sales representative in charge of the office. He is providing technical service to aerosol loaders and marketers in the area.

GLENN A. PIPER, JR.

A native of New York, Mr. Piper was graduated from Ursinus College with a B.S. degree in chemistry. Shortly after joining Kinetic, he was assigned to the aerosol sales service laboratory at Carney's Point, N. J., as a technical representative.

Rubber Floor Matting

The availability of one-eighth inch thick black and brown rubber runner floor matting in widths of 24, 36 and 48 inches in 50 yard rolls was announced recently by Superior Rubber Manufacturing Co., Chicago. The rubber matting comes in both corrugated and ribbed surface designs. Sanitary supply jobbers can buy the matting at factory prices to enable them to compete with rubber distributors.

Watkins Sells in Newark

Sale of the Watkins Building, 231 Johnson Ave., Newark, N. J., by J. R. Watkins Co., Winona, Minn., and removal of the firm's eastern manufacturing operations to Ohio, was announced recently. The six-story Watkins building, one of the largest industrial structures in Newark, contains 211,000 square feet of manufacturing and office space. The property includes three acres on which there is a 10-car railroad siding. Bymart, Inc., manufacturers of Tintair hair dressing, formerly occupied 80,000 square feet of the building. Peddie Johnson Building Co. acquired the plant from Watkins.

McLaurin Joins Geigy

Geigy Co., New York, announced recently that J. F. McLaurin, president of the National Ginners' Assn., Bennettsville, S. C., had joined the company as of Jan. 1. Geigy is understood to be increasing the number of dealerships on DDT, and Mr. McLaurin is expected to engage in this expansion program.

Kern's Liquisan

Varnish remover, previously obtainable only in industrial sizes, now can be obtained in pint, quart and gallon cans for home use, it was announced recently by J. F. Kerns Co., New York. Applied to varnish and paint covered wood or metal, the solution decomposes the varnish and paint without harming the wood or metal, the maker claims.

Alters Dog Shampoo Claims

A stipulation signed by Albert H. Green, trading as Insecticide Products Co., New York, in which it was agreed to discontinue statements in advertising for "K-9 Amazing Dog Shampoo" representing or implying that the product will immunize dogs to fleas, lice, ticks, gnats and mites, was announced recently by the Federal Trade Commission, Washington, D. C. The respondent also agreed to stop representing that the U. S. Department of Agriculture, or any other government agency, has approved the advertising claims made for the product.

Whittaker Appoints Two

Appointment of Robert T. Smith as executive salesman was announced recently by Whittaker, Clark

ROBERT T. SMITH

& Daniels, New York. Mr. Smith has been with the firm for nineteen years, working as salesman, mostly in Michigan territory. He is being succeeded there by D. R. Leiser, vice-president of Harry Holland & Son.

Arthur N. Sudduth recently joined Whittaker as manager of the company's new abrasive division. Mr. Sudduth has been with Jas. H. Rhodes & Co., Chicago for the past 17 years.

Calspray Names Dr. Fisher

The appointment of Dr. R. A. Fisher as district manager for California Spray-Chemical Corporation's new district, comprising the states of Arizona, New Mexico and western Texas was announced recently by A. W. Mohr, president. Dr. Fisher was formerly research coordinator at the company's head office in Richmond, Calif. He is making his headquarters at the company's office and plant at 1042 N. 21st Street, Phoenix, Ariz.

Dr. Fisher received a master of science degree in entomology from the University of Idaho, and in 1937 was awarded his Ph.D. in entomology at Iowa State College. He then worked in the Bureau of Entomology and Plant Quarantine of the United States Department of Agriculture for a year and a half. Later he joined the University of Idaho where he served as an entomology instructor.

In 1946, after serving as a captain in the army, Dr. Fisher joined California Spray-Chemical Corp. as a technical field man in the state of Washington to advise farmers and ranchers on pest control. In January, 1948 he was made branch manager at Portland, Ore., a position he held until his appointment early in 1952 as research coordinator.

Siegel in New Post

Henry B. Siegel, manager of the Selig Co. of Texas has been named secretary-treasurer of the company, it was announced recently. He succeeds the late Julius Simon.

At a recent sales meeting of the Selig Co., Atlanta, Ga., company president Albert S. Selig said that the firm was planning an extensive expansion program for 1953 in the fields of disinfectants, soaps, insecticides, floor finishes and waxes.

Revise N. Y. Sanitary Code

The Board of Health of the City of New York gave informal approval at a recent meeting to an interim move toward what it called "clarity, simplicity, and firmness" in the city's sanitary code. This move called for considering at least one obsolete or useless provision in the code for repeal whenever some addition to the code is considered for adoption by the board. Since its beginning in 1866 the code has grown to a volume of more than 300 pages, with an index running to twenty-one pages, according to Dr. Haven Emerson, member of the board.

Change Insecticide Rules

Changes in the Federal Insecticide Act Regulations announced recently provide that the Department of Agriculture notifies each registrant at the end of a five-year period that his registration is up and that, if he wishes to continue it for another five-year period, he must so notify the department. A provision concerning permits for experimental work outlines in more detail the steps to avoid hazards in experimentation. The changes come into effect this month.

Thomas J. Starkie Dies

Thomas J. Starkie, 60, vice-president, director and a member of the executive committee of Witco Chemical Co., and director of Witco Chemical Co., Ltd., died Dec. 21 following a heart attack. He began his career in the chemical field with Harshow Chemical Co., and joined Witco in June, 1921. He was a member of the Chemists' Club, and the Uptown Club of New York and the Salesmen's Association of the American Chemical Industry. Mr. Starkie is survived by his widow, Nellie Wright Starkie; a son, James M., and a daughter, Elizabeth E. Starkie.

Packard Now a V.-P.

Howard M. Packard, treasurer of S. C. Johnson & Son, Racine, Wis., has been elected vice-president of the company, it was announced recently by H. F. Johnson, chairman and president.

New plant of Choisy Laboratories, Louiseville, Que., Canada. The company, which will double its plant capacity in 1953, was founded in 1946 by Yvon G. Trudeau, president. Equipped with modern control laboratories and research facilities, the company has marketed some 80 sanitation products. Besides deodorizers, cleaners, bactericides and liquid soaps sold under the firm's own registered trade names, Choisy will now make its products available under private label.

Geerpres Moves Plant

Geerpres Wringer, Inc., recently moved into its new factory in Muskegon, Mich. The new quarters represent an increase of approximately 100 per cent in manufacturing capacity. It is of modern fireproof construction, has a 400 feet siding on the Grand Trunk railroad, loading docks to accommodate five trucks or trailers simultaneously and a delivery ramp into the rear of the plant. The plant has a floor space of 19,200 square feet.

New home of Geerpres Wringer, Inc.

Schaeffer Elects Shields

The election of Tom W. Shields as president of Schaeffer Manufacturing Co., St. Louis, was announced recently. He succeeds William Shields as head of the 114-year-old firm which specializes in soaps, liquid waxes and other chemical specialties.

Mills in New Post

Bridgeport Brass Co., Bridgeport, Conn., recently announced that John H. Mills, formerly director of priorities, has been advanced to the post of director of purchases. Mr. Mills joined the firm in 1924 as a foreman in the casting division.

Discuss Carnauba Supply

The possibility of an artificial shortage of carnauba wax resulting from export restrictions imposed by the Brazilian government was the topic at a recent meeting of the vegetable waxes importers and refiners industry advisory committee with representatives of National Production Authority. Imports received in other countries have to be examined and certified by Brazilian consulate or trade bureau representatives under the new rules. This, the committee said, places a burden on importers, putting them in the position of having to aid enforcement of Brazilian export regulations. According to the committee, supplies of carnauba, ouricury, and candelilla waxes are good, and are expected to remain so unless an emergency develops. Current high prices are creating surpluses in the countries of origin, while various substitutes for higher priced imported waxes are being found by American manufacturers.

The committee recommended that NPA take up the problem of Brazilian export regulations with the Office of International Trade, and other Government agencies.

Semet-Solvay "Alcowax"

"Alcowax", a wax-like, low molecular weight material, derived from ethylene, has recently been announced by Semet-Solvay Division, Allied Chemical & Dye Corp., New York. It has a melting point of approximately 100°C, white translucent color, and is said to be tasteless, nontoxic, substantially odorless, and water resistant. The manufacturer recommends it for use in polishes, and as an ingredient in cosmetics, among other applications. "Alcowax" is currently being made on small plant scale at Buffalo, N. Y. A full-scale petrochemical plant is under construction at the same location for the production of this material and is expected to be in operation some time in 1953.

FTC Bans Polish Claims

Advertising that "Glitter Super Glaze," an automobile polish, will restore the original color of an automobile is to be discontinued under the terms of a stipulation signed by Glitter Products, Inc., Detroit, Mich., the Federal Trade Commission announced recently.

The respondent also agrees to cease from representing in its advertising: 1. That the application of its product produces a hard, lasting, glass-like finish or a finish which will last twice as long as finishes produced with the use of other polishes or longer than is in fact true; 2. That its product will protect or save the finish of any automobile from fading in sunlight or from grit or dirt; 3. That its product contains no oil or grease; 4. That its product is not a polish.

Sun Advances Hurd

Ira S. Hurd has recently been appointed director of sales promotion for Warwick Chemical Co., Division of Sun Chemical Corp., Long Island City, N. Y. Mr. Hurd, formerly the firm's general sales manager, now directs all phases of Warwick's promotional activities, including promotional programs for detergents, surfactants, and stearates. He makes his headquarters in the Sun Chemical Building, Long Island City.

Gage Joins Grace Chemical

William P. Gage has been named president and a director of Grace Chemical Co., wholly owned subsidiary of W. R. Grace Co., New York, it was announced recently. The appointment becomes effective February 1, 1953. Mr. Gage has been vice-president in charge of manufacturing of Shell Chemical Corp., since 1941, having joined Shell Oil Co., in 1929.

Grace Chemical Co. was formed in 1952 and is currently engaged in the construction of its first manufacturing unit, a 20 million dollar nitrogen plant near Memphis, Tenn. The plant is scheduled for completion in 1954.

Decontrol Shellac Exports

Removal of dry shellac from the positive list, effective January 2, was announced recently by the Office of International Trade. It may now be shipped to all countries except Iron Curtain countries, Hong Kong, and Macao without individual export licensing.

PROFESSIONAL Directory

CLASSIFIED

Classified Advertising — All classified advertisements will be charged for at the rate of ten cents per word, $2.00 minimum, except those of individuals seeking employment where the rate is five cents per word, $1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of *Soap & Sanitary Chemicals,* 254 West 31st St., New York 1.

Positions Open

Salesman Wanted: For Sanitary Chemicals to sell directly to institutions in territories of California, Arizona, or Nevada. Car necessary. To top producer — salary, plus percentage plus expenses. Manufacturer established 1927. Troy Industrial Products, 2249 East 38th St., Los Angeles 58, Cal.

Salesmen Wanted: Soap and sanitary chemical specialty salesmen wanted with following among hospitals, schools, churches, industrial buildings, etc. Large commission with draw. Alexander Chemical Co., 36 Walworth Street, Brooklyn 5, N. Y. TRiangle 5-8386.

Wanted: Man with broad chemical and soap manufacturing experience for medium-sized long-established Pacific Coast plant for key production position. Will consider man with chemical engineering and production managerial experience other fields. Salary $7500. Give all details, age, and references. Address Box 665, c/o *Soap.*

Salesman: Experienced on dishwashing machine powder sales and service with executive ability wanted. Opportunity unlimited for experienced man in this field. Can become sales manager with old established chemical manufacturer. Must be willing to travel, schooling and training distributor's salesmen. Financial remuneration limited only by man's capabilities. Salary, or draw, car, traveling expenses, plus bonus. Tremendous opportunity for right man with experience in this field. All applications held confidential. Do not call by phone or in person. Write only for appointment, giving name, address, telephone number. The Theobald Industries, P. O. Box 72, Harrison, N. J.

Soapmaker: All-around soap maker wanted. Give full details first letter. Factory located Pacific Coast. Address Box 664, c/o *Soap.*

Sales: Wanted by leading producer perfuming materials assistant to sales manager. Excellent opportunity for man 35-40 who knows business and has had several years sales experience. Must be able to handle sales correspondence. Give record, experience, education, salary, etc., in full confidence. Address Box 666, c/o *Soap.*

Technical Director: A man experienced in the development and production of soaps, waxes, synthetic detergent formulations, and other chemical specialties, as technical assistant to president of well known, progressive company of medium size. Location—Eastern Seaboard. All inquiries confidential. Address Box 667, c/o *Soap.*

Chemist: Top man experienced in organic emulsifiers, synthetic detergents, soaps and emulsion waxes. Good position in charge of development and control laboratories of prominent eastern manufacturer. Sound technical knowledge and creative thinking ability required for this permanent important position. Our employees know of this ad. Address Box 668, c/o *Soap.*

Situations Wanted

Soapmaker: Experienced soapmaker seeks part time, short term or permanent employment within 100 miles radius of Camden, N. J. Address Box 669, c/o *Soap.*

Soapmaker & Chemist: Competent. Having long experience in making of all kinds of soaps and cleaning compounds. Experienced chemist and glycerine recovery. Can take full charge of production. Address Box 670, c/o *Soap.*

Sales Representation: Chemical engineer with six years of practical chemical products sales experience will act as sales representative on Pacific Coast for two non-competing manufacturers of chemicals or allied materials. Finest references, excellent sales record. For further information write to Box 671, c/o *Soap.*

Chemical Compounder: Available. Specializing in liquid soap, liquid cleaners and water emulsion liquid floor waxes. Proven quality by large users. Experienced in setting up plant and purchasing. Address Box 672, c/o *Soap.*

Reprints Synthetic Detergents Up-To-Date II available from Mr. J. W. McCutcheon, 475 Fifth Ave., N. Y. C.

Situations Wanted

Chemist: Extensive practical experience in the following formulations: — wax compositions; floor lacquers; waterless hand cleaners; shoe polishes; and automotive cleaners, polishes, and specialties, including silicones. Desires position, preferably in New York metropolitan area. Will consider working on consultant basis. Address Box 677, c/o *Soap*.

Miscellaneous

Canadian Distributor: With head office at Windsor, Ontario, and outlets in several Ontario cities, in sanitation lines, restaurant contacts, hospital, school and factories—looking for new lines to sell to same contacts. Prefer reasonable exclusiveness, based on volume obtainable, and have live wire sales staff now handling top grade items. Plenty of warehousing available — would consider investment by reputable firm wanting Canadian headquarters and distribution point. Good references — moderate capital — in business five years. Address Box 673, c/o *Soap*.

Wanted: Complete soap or sanitary chemical plants. Also individual items such as crutchers, plodders, mills, mixers, presses, dryers, filling equipment, etc. R. Gelb & Sons, Inc., State Highway No. 29, Union, N. J.

Wanted: 2500-3000 gallon vertical stainless steel processing kettle, partially steam jacketed. Give complete information including age, condition, dimensions and price. Address Box 674, c/o *Soap*.

(*See Page* 102)

Miscellaneous

Wanted: One Fitzpatrick Comminuting machine. One 42x120 Buffalovac Dryer. One Glycerine evaporator either double or single effect. State price, age, condition and where can be seen. Address Box 675, c/o *Soap*.

Wanted: A good used Viscolizer or homogenizer. Give make, size, condition and price. Address Box 676, c/o *Soap*.

Wanted: Kettles, frames, pulverizers, cooling rolls, chip dryers, plodders, cutting tables, exaporators, packaging units, automatic soap presses, mixers, stainless steel tanks. Will consider idle or operating plant. P. O. Box 1351, Church St. Sta., New York 8, N. Y.

For Sale

For Sale: Back issues of SOAP & SANITARY CHEMICALS. We have a supply of issues for 1948 through 1952 which are available. If you require any issues to fill out full volumes for these years, write us direct. Glenn Laboratories, 312 Locust St., St. Louis 2, Missouri.

For Sale: Now being operated as a side line and grossing $30,000 this janitor supply business could easily be doubled or tripled by someone who would like to live in Florida. No local competition. $10,000 will buy inventory and delivery truck. Address Box 678, c/o *Soap*.

For Sale: Sprout Waldron heavy duty thousand pound horizontal powder mixer with bucket loading elevator and seven and half AC motor. Asking $600. Franklin Supply Co., 86 Industrial St., Rochester 6, N. Y.

For Sale

For Sale at Sacrifice: New Battle Creek top and bottom packaging sealer with two triangle weighers and conveyors; 1 ton ribbon-type mixer. Samuel Halaby, Inc., Rochester, N. Y.

For Sale: 1500 & 3000# soap crutchers; wrapper type S; P & S rolls; 3 & 5 roll mills; 10" plodder; Pdr. mixers; Fillers; Dryer: Boilers: other items. I. E. Newman, 5602 Blackstone Ave., Chicago, Ill.

Are You Posted on SYNTHETIC DETERGENTS and SOAPS & DETERGENTS? See page 102.

For Sale: 1—Lehmann 12" Plodder; 1—Houchin 14"x36" 5-roll inclined watercooled mill, 30 H.P. motor; 1—Baker 20"x33" 5-roll mill, 55 H.P. motor; 1—Jones A, automatic horizontal soap press; 1—Jones automatic "K" press; 2—Package Machinery Co. model TT and model N soap wrappers; 3—Steel vertical, jacketed soap crutchers, 3000 lb., 2000 lb. and 1000 lb.; 1—6 knife soap chipper, m.d.; 1—4'x8' steel flaking or cooling roll; 1—Pneumatic Scale Packaging Line. Filter presses 12" to 42", powder fillers; dry powder mixers, 450 cu. ft., 3000 lb. and smaller sizes; paste and liquid mixers; Rotex screens; Hammer mills; soap frames; Dopp jacketed kettles 100, 350, 600 gallon; Blackmer pumps; tanks; carton gluer-sealers. Ask us to quote on your requirements. Tell us what idle machines or plants you have for sale. Consolidated Products Co., Inc., 15-21 Park Row, New York 38, N. Y. Phone BArclay 7-0600. Inspect our stock at our warehouse, 331-341 Doremus Ave., Newark, N. J.

For Sale

Liquidating: Chemical manufacturing plant. Large number of horizontal powder mixers, vertical steel mixing tanks, vertical soap kettles, steel storage tanks, 500 gallon glass-lined jacketed kettle, 2—10,000 gallon rubber-lined vertical closed steel tanks with 25 HP turbo agitator, scales, filling machines, factory equipment, warehouse equipment, etc. Inspection at plant at 6th St. & Bushkill Drive, Easton, Pa. Perry Equipment Corp., 1410 N. 6th St., Phila. 22, Pa.

All subscriptions to SOAP & SANITARY CHEMICALS entered or renewed at this time include a copy of the 1953 SOAP BLUE BOOK & Catalog, the 280 page buyers' guide, out March 15. Yearly subscription, U. S. $4.00; Canadian & Pan American, $5.00; all others $6.00.

For Sale: Proctor & Schwartz 6-Fan automatic soap chip dryer, 2-roll chilling unit, large roll 48" dia. Empire State foot presses. Soap frames. Allbright-Nell 4' x 9' chilling rolls. Blanchard #14 soap powder mill. Lehmann 4-roll W. C. 12" x 36" steel mill Houchin 8½" x 16" 3-roll and 18" x 30" 4-roll Granite Stone Mills. Kettles and tanks, iron, copper, aluminum and stainless. Dryers vac. & atmos. Jones automatic soap presses. Slabbers and cutting tables, hand & power. Crutchers. Six-knife chipper. Filter presses 12" x 42". Wrapping & sealing machines. Powder, paste & liquid mixers. Rotex sifters. Filling machines, Grinders, Hammer mills. Colloid mills. Three-roll steel mills 8" x 22" to 16" x 40". Portable elec. agitators, pumps, etc. Send for bulletin. We buy your surplus equipment. Stein Equipment Company, 107—8th St., Brooklyn 15, N. Y. STerling 8-1944.

For Sale

For Sale: Reprints of "Synthetic Detergents Up-to-Date" II (Newest Revision) now available . . . 44 pages listing over 1000 detergent products by trade name, manufacturer, class, type, formula and uses—price $1.50. Remittances must accompany order. Available direct from author. John W. McCutcheon, 475 Fifth Avenue, New York 17, N. Y.

For Sale: Will sell at sacrifice 400, 50-gal. drums soap-synthetic detergent paste useful for emulsifying, wetting and cleansing purposes. F.O.B. N. Y. C. Similar to Duponol paste. For further details write Box No. 679, c/o *Soap*.

Standard Reference Books:
See Page 102

Kapelsohn Joins DRO

Leon Kapelsohn has joined DRO, Inc. and Chemical Specialties Co., New York, as assistant to Harry Shapiro, president of both companies, it was announced recently. Mr. Kapelsohn is in charge of purchasing, office supervision, and management of manufacturing of cosmetic specialties and DRO insecticides. He was previously with Hearn Department Stores, where he held the position of assistant controller, and had formerly been director of the bureau of standards.

Can Quota Decontrolled

Quota percentage restrictions on the number of cans used to pack various products expired December 31, 1952, it was announced by National Production Authority. At the same time the agency revoked directions No. 2, 3, and 5 to M-25, which implemented the quota restrictions. NPA also amended the order to include fiber body cans in the definition of "cans," thus restoring the situation prevailing prior to the last amendment to M-25, issued October 10, 1952. It was explained that this change was made for the sake of administrative efficiency and convenience.

C. A. Lewis, director of the containers and packages division of NPA, said that the quota percentage limitations of M-25 were permitted to lapse because the action was not expected to involve a net increase in the industry's use of tin.

Clough Announces Change

Clough Chemical Co., Ltd., St. Laurent, Quebec, recently announced that all business formerly conducted in the names of its associate companies, Richards Chemical Works, Ltd. and Onyx Oil & Chemical Co., will henceforth be conducted by Clough. The firm's head office remains in Ville St. Laurent, with a sales office in Montreal and a factory office in St. John's, P.Q.

Wax Odor Bulletin

A series of odors for use in various types of waxes and polishes is described by Sindar Corp., New York, in its technical bulletin S-1, "Wax and Polish Odors", which has just been issued. The bulletin states that the odors listed are the result of extensive research and consumer panel tests.

The bulletin offers odors for floor waxes, furniture polish and metal polishes, and gives concentrations effective in the various types covered. A short description of the wax and polish odors is also given.

New Doyle Vacuum Units

The availability of two completely new "Vac-It" units, designated Models No. 30 and No. 40, were announced recently by Doyle Vacuum Cleaner Co., Grand Rapids, Mich. A feature of the new units is a new suction unit that applies full motor shaft energy to produce the correct combination of volume, velocity and suction. The new units have a streamlined appearance designed to make the cleaners easier to handle, use and sell.

Other features include: four positive, quick-lock cams to secure head and tank assembly; easy accessibility of all parts; convenient carrying handles; one h.p. Universal motor with extra large brushes for longer life; independent by-pass motor cooling; large area bag, either exposed or enclosed; cord strain absorber; low-center hose connection; demountable caster ring; four swivel free casters, and rounded bottom for easier cleaning.

Dairy Sanitizers Report

Investigators at Massachusetts Agricultural Experiment Station, Amherst, Mass., have been testing various chemicals which might be used as sanitizing agents on dairy farms, in place of chlorine and quaternary ammonium compounds. Tests were run on several resorcinol compounds, chlorinated phenols and chlorinated morpholinium, but the conclusion, as reported recently in the station's latest annual report, was that "Although many of these products have excellent germicidal properties, they have not been perfected to the point where they can be recommended for replacing the chlorine and quaternary types of sanitizing agents."

Dr. W. S. Mueller of the department of dairy industry, also reported that in investigations of quaternaries it was found that as little as five to 10 p.p.m. of quaternary in the milk would significantly retard acid and curd formation in the manufacture of cottage cheese. Thus, he said, "Dairy farmers and milk plant operators should use sanitizing procedures that will avoid contamination of the milk with inhibitory concentrations of quaternary."

Index to ADVERTISERS

Tale Ends

WELL, gentle reader, we're off to a new start! Hope springs eternal in the breast of American business that Jan. 20, 1953 may be a significant date. After 24 years of being accused of everything from arson to mayhem, of being declared guilty even before trial, and of shouldering the heaviest tax burden in the history of the nation, industry and business look forward to the dawn of a new day. As for us, we don't expect too much too quickly. After 24 years of the tide always running one way, it may take time.

• • •

From all parts of the world, we received Christmas cards and season's greetings. Thanks to our many friends. Your good wishes are reciprocated with interest. The large number of greetings which we received made it physically impossible to acknowledge them individually. But we can assure you, they were wonderful to receive. The farthest-away greeting came to us from Alan Crothall of Commercial Cleaners, Ltd., Christchurch, New Zealand. Others from Africa, South America, Europe, and every state in the Union. Thank you, good friends!

• • •

How to scare the hell out of your prospective customers in one easy lesson! A salesman in a New York department store recently was demonstrating one of the new dip-and-rinse silver cleaners. He wore a rubber mitten over his hand which in turn was swathed in bandages. What a marvelous opportunity for Mr. Delaney and his Congressional Committee! Probably the bloke hurt his hand at home fixing the furnace. But what difference?

• • •

Rumors regarding Lever's new "Lifebuoy Soap" have been more numerous than fleas on an alley cat. The new deodorant soap will come to market in the spring with a real blare of trumpets, according to the current grapevine report. The latest added rumor direct from the mill is that Du Pont is making the new bacteriostatic compound which will be used in the new "Lifebuoy."

• • •

Just received a note from Harry Peterson of Continental Filling out in Danville, Ill. Harry gave us a quick jab with the needle on our editorial in the previous issue in which we foolishly admitted that we had been slightly skeptical about aerosols when they first came out some years back. (A one pound "bomb" of insecticide then cost $4.50 at retail. Can you blame us for being skeptical?) But, we changed our mind and admitted our earlier error. So, be warned, – don't ever admit to an aerosol man that you ever had the slightest doubt that the aerosol is the greatest invention since the telephone. Or, you'll get yours quick!

• • •

"Friendship of Americans for the needy overseas can be told no more graphically than in shipments of ordinary milk cartons containing homemade soap. . . . People who receive the cartons in Korea and other refugee zones fully understand the act of kindness symbolized by the soap." Thus stated the Los Angeles Times *in telling about the work of the American Friends Service Committee. In one week, this Quaker organization sent to Korea 54,000 pounds of clothing and several tons of soap, the* Times *added. If only somebody here at home would tell these well-meaning folks the horrible truth about homemade soap before the Koreans are forced to do so in self defense!*

• • •

The secret's out! Before and after each meeting of the two major political conventions in Chicago last summer, the amphitheatre was deodorized. This very appropriate "cleaning of the air" was done by U. S. Sanitary Specialties Corp. of Chicago, according to Bill Jessop, prez., by applying suitable deodorants with fogging machines through the air-conditioning system of the huge building. The same job was done for the more recent International Live Stock Show in Chicago.

Dishpan hands are the result of being too clean and have become a leading "occupational disease" among American housewives, according to Dr. Matthew J. Brunner of Northwestern University. He spoke before a recent annual meeting of the American Academy of Dermatology and Syphilology and stated that the widening use of the new "artificial soaps" was the cause of the difficulty. (Note: Here's a chance for the soap boys to stick their spear into the synthetics once again). He urged manufacturers to "remove the irritants" from detergents but to retain "their wonderful cleaning properties." Well, detergent makers, what are you waiting for? Why don't you do what the doctor says?

• • •

Now we know why we still have cockroaches with us after 50,000,000 years. The beast can synthesize the amino acids, cystine and methionine. Except for a few cud-chewing animals, the German roach is one of a very few members of the animal kingdom which can do this trick, according to Dr. Richard Block, entomologist. So, we might as well settle back and decide to put up with the roaches. Chlordane, lindane or not, we're going to have them with us for a long time to come, – for which we in the insecticide racket should be glad, not sad.

Unco Simile LAVENDER

This true-to-flower specialty with its soft yet mellow note further commends itself with its great stability

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Plant and Laboratories, TOTOWA, N.J.

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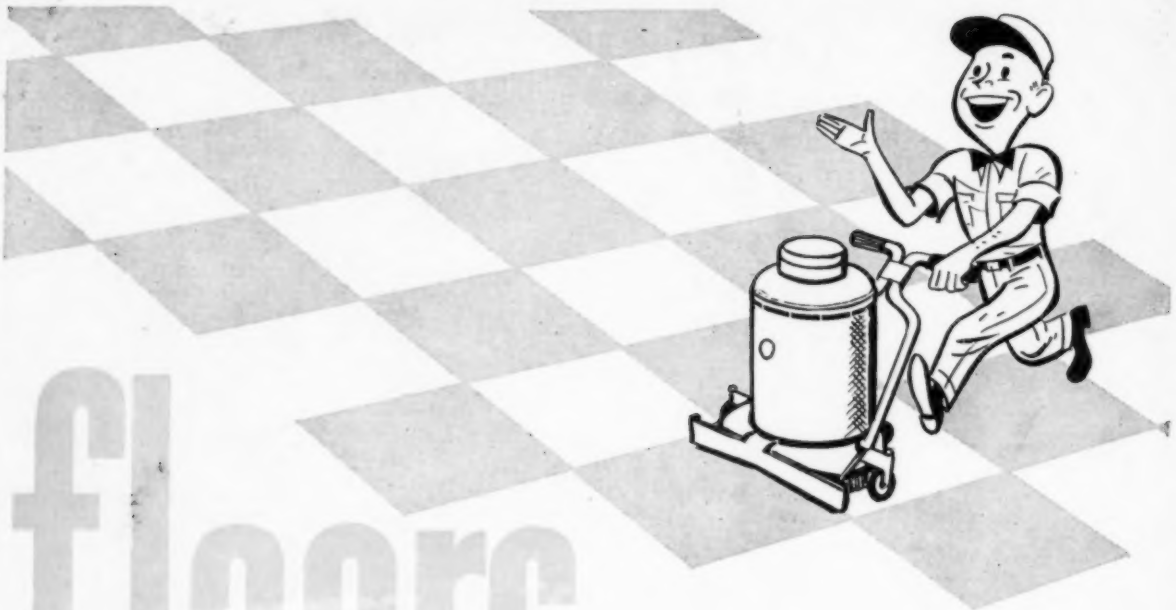

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VARCO DELUXE CLEANER – *The famous original red cleaner with the spice odor!* Not that the color had a lot to do with its popularity – we colored it red to make it look *different* from any other cleaners because it *is* a different cleaner – a *better* cleaner and a nicely scented cleaner.

What really sold VARCO DELUXE CLEANER and what *continues* to sell it is QUALITY. Our competitors have been able to copy the color – but as yet no one has equaled the marvelous performance of this cleaner under actual conditions of use.

So – if it's performance – if it's clean floors you want – and satisfied customers – then *you* need VARCO DELUXE CLEANER! For highest quality at lowest possible cost standardize on VARCO DELUXE CLEANER – the original red cleaner with the delightful spice odor.

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SAFE ON ANY FLOOR SURFACE

VARCO DELUXE CLEANER is unusual in that it contains both soap and synthetics! A practical blend giving the utmost benefits of both types of cleaner. Soap to remove the dirt, synthetics to emulsify it.

FOR PAINTED WALLS, WOODWORK, Etc.

VARCO DELUXE CLEANER has a multitude of uses! Washing walls, painted surfaces, floors, equipment, truck bodies, etc. A marvelous cleaner that you'll be proud to sell – either under our label or your own.

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Please send us without cost or obligation, a sample, prices and other information of VARCO DELUXE CLEANER. We'll give it a thorough test.

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